(29) G 4620: core type IV i, uncased.
    Chapel: rubble, exterior room near SE corner of east façade; entered from east at north end of east wall:
    7.2 x 1.5 m.; area, 10.8 sq. m.; prop. 1/4.8.

(30) G 4420 N; core type IV i, uncased.
    Chapel: single room c.b. at north end of façade; south end blocked by G 4421; single room with one (?) niche in c.b. west wall; entered from east at north end of east wall:
    4.45 x 1.9 m.; area, 8.46 sq. m.; prop. 1/2.34.
    Later intruded and obstructed by G 4422 with its chapel abutting on east face of G 4420 N.

(31) G 4820: core type IV i, uncased.
    Chapel: rubble, one room south of middle; entered from east at south end of east wall; unexplained c.b. wall south of it:
    4.05 x 1.7 m.; area, 6.89 sq. m.; prop. 1/2.38.

(32) G 4910: core type II a, uncased.
    Chapel: one room, originally of c.b. with the east wall later replaced by thicker rubble wall; long N-S room with large niche south of middle in which stepped facing of mastaba was exposed. West wall, a large plain niche south of middle niche and small plain niche at north end of same wall; entered from east in north end of east wall:
    10.2 x 1.4 m.; area, 14.28 sq. m.; prop. 1/7.29.

In addition to these thirty-two chapels a number of nucleus cores were found without any chapel preserved—G 4320, G 4720, G 4730, G 4740, G 4760, G 4830, G 4850, and G 4860. One of these, which had an unused burial-place (G 4730), probably had no chapel constructed. Others had no doubt had the c.b. chapel destroyed by weathering (G 4320) and the rest of the chapels had been destroyed by later constructions. G 4860, which had a slab-stela, had had its chapel destroyed by such constructions. There remain a number of chapels which were exterior to chapels of type (2) and type (3), type (4) and type (5). Before taking up these subsidiary c.b. chapels I give the following table of the chapels listed above to permit a review.

Chapels of type (1 a):

| No. | Whole chapel | Slab-stela | Rooms | Area
|-----|--------------|------------|-------|------
| (1) | G 4250       | 1/2.17     | 3+    | 42.52
| (2) | G 1203       | 1/3.47     | 3+ court | 17.36
| (3) | G 1205       | 1/3.76     | 5      | 28.88
| (4) | G 2100       | ..         | ..    | ..
| (5) | G 4360       | 1/1.62     | 4 (?) | 22.29
| (6) | G 4460       | 1/3.0      | 4      | 32.29
| (7) | G 4560       | ..         | 3+    | ..

Fig. 108. G 4530

Plan
### Room a: Whole chapel

<table>
<thead>
<tr>
<th>No.</th>
<th>Room</th>
<th>Area</th>
<th>Prop.</th>
<th>Rooms</th>
<th>Area</th>
<th>Slab-stela</th>
</tr>
</thead>
<tbody>
<tr>
<td>(8)</td>
<td>G 4350</td>
<td>11.93</td>
<td>1/2.35</td>
<td>4</td>
<td>27.61</td>
<td>slab-stela</td>
</tr>
<tr>
<td>(9)</td>
<td>G 4450</td>
<td>7.99</td>
<td>1/2.75</td>
<td>3</td>
<td>14.06</td>
<td>emplacement</td>
</tr>
<tr>
<td>(10)</td>
<td>G 2135</td>
<td>13.5</td>
<td>1/2.16</td>
<td>5</td>
<td>33.0</td>
<td>slab-stela</td>
</tr>
<tr>
<td>(11)</td>
<td>G 1207</td>
<td>9.47</td>
<td>alcove room</td>
<td>3</td>
<td>16.22</td>
<td>slab-stela</td>
</tr>
<tr>
<td>(12)</td>
<td>G 1209</td>
<td>8.42</td>
<td>alcove room</td>
<td>2+</td>
<td>9.58</td>
<td>no slab-stela</td>
</tr>
<tr>
<td>(13)</td>
<td>G 1235</td>
<td>9.45</td>
<td>1/3.09, orig. alcove room</td>
<td>4</td>
<td>14.09</td>
<td>slab-stela</td>
</tr>
<tr>
<td>(14)</td>
<td>G 1227</td>
<td>8.06</td>
<td>1/2.86, orig. 3</td>
<td>3</td>
<td>?</td>
<td>slab-stela</td>
</tr>
</tbody>
</table>

Mean areas of rooms a, 12 chapels: 7.14 to 19.5; mean, 11.12 sq. m.
Mean props. of rooms a, 10 chapels: 1/1.62 to 1/3.76; mean, 1/2.72.
Mean total areas: 9.58 to 44.12 sq. m.; mean, 23.58 sq. m.
Mean numbers of rooms: 2+ to 5; mean, 3.54 rooms.

Chapels of type (1 b):

<table>
<thead>
<tr>
<th>Room</th>
<th>Area</th>
<th>Prop.</th>
<th>Rooms</th>
<th>Area</th>
<th>Slab-stela</th>
</tr>
</thead>
<tbody>
<tr>
<td>(15)</td>
<td>G 4160</td>
<td>(a) 2.43</td>
<td>bent room</td>
<td>1+4</td>
<td>(a-f) 21.45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(b-c) 5.08</td>
<td></td>
<td></td>
<td>(b-f) 19.02</td>
</tr>
<tr>
<td>(16)</td>
<td>G 4260</td>
<td>(a) 3.52</td>
<td>bent room</td>
<td>1+3</td>
<td>(a-c) 18.97</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(b-c) 3.9</td>
<td></td>
<td></td>
<td>(b-c) 15.45</td>
</tr>
</tbody>
</table>

Chapels of type (1 c):

<table>
<thead>
<tr>
<th>Room</th>
<th>Area</th>
<th>Prop.</th>
<th>Rooms</th>
<th>Area</th>
<th>Slab-stela</th>
</tr>
</thead>
<tbody>
<tr>
<td>(17)</td>
<td>G 1201</td>
<td>9.06</td>
<td>1/2.65</td>
<td>4</td>
<td>43.11</td>
</tr>
<tr>
<td>(18)</td>
<td>G 1225</td>
<td>12.43</td>
<td>1/2.82</td>
<td>2+</td>
<td>..</td>
</tr>
<tr>
<td>(19)</td>
<td>G 4540</td>
<td>14.95</td>
<td>1/2.21</td>
<td>4</td>
<td>27.45</td>
</tr>
<tr>
<td>(20)</td>
<td>G 4550</td>
<td>6.74</td>
<td>1/1.12</td>
<td>5</td>
<td>22.73</td>
</tr>
<tr>
<td>(21)</td>
<td>G 4430</td>
<td>7.96</td>
<td>1/2.46</td>
<td>3</td>
<td>12.13</td>
</tr>
<tr>
<td>(22)</td>
<td>G 4660</td>
<td>11.5</td>
<td>1/3.18</td>
<td>5</td>
<td>23.5</td>
</tr>
<tr>
<td>(23)</td>
<td>G 4650</td>
<td>(a) 11.88</td>
<td>1/1.88</td>
<td>5</td>
<td>27.45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(b) 3.82</td>
<td>1/0.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(24)</td>
<td>G 4330</td>
<td>5.05</td>
<td>1/2.6</td>
<td>2 para.</td>
<td>12.53</td>
</tr>
<tr>
<td>(25)</td>
<td>G 4630</td>
<td>5.07</td>
<td>1/3.0</td>
<td>3</td>
<td>30.82</td>
</tr>
</tbody>
</table>

Mean areas of rooms a, 9 chapels: 5.05 to 14.95; mean, 9.4 sq. m.
Mean total areas, 8 chapels: 12.13 to 43.11; mean, 24.96 sq. m.
Mean props. of rooms a, 9 chapels: 1/1.12 to 1/3.18; mean, 1/2.44.
Mean numbers of rooms: 2 to 5; mean, 3.99 rooms.

Chapels of type (1 d):

<table>
<thead>
<tr>
<th>Room</th>
<th>Area</th>
<th>Prop.</th>
<th>Rooms</th>
<th>Area</th>
<th>Slab-stela</th>
</tr>
</thead>
<tbody>
<tr>
<td>(26)</td>
<td>G 1225-annex</td>
<td>5.61</td>
<td>1/2.07</td>
<td>1</td>
<td>..</td>
</tr>
<tr>
<td>(27)</td>
<td>G 1228</td>
<td>6.04</td>
<td>1/3.58</td>
<td>1</td>
<td>..</td>
</tr>
</tbody>
</table>
Mean areas of rooms a, 7 chapels: 5.61 to 14.28 sq. m.; mean, 9.15 sq. m.
Mean props. of rooms a, 6 chapels: 1/2.07 to 1/3.58; mean, 1/2.87.

Summary of mean measurements:

<table>
<thead>
<tr>
<th>Type (1 a)</th>
<th>Area</th>
<th>Prop.</th>
<th>Rooms</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room a:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. (28) G 4530</td>
<td>12.0</td>
<td>1/2.09</td>
<td>1</td>
<td>..</td>
</tr>
<tr>
<td>No. (29) G 4620</td>
<td>10.8</td>
<td>1/4.8</td>
<td>1</td>
<td>..</td>
</tr>
<tr>
<td>No. (30) G 4420 N</td>
<td>8.46</td>
<td>1/2.34</td>
<td>1</td>
<td>..</td>
</tr>
<tr>
<td>No. (31) G 4820</td>
<td>6.89</td>
<td>1/2.38</td>
<td>1</td>
<td>..</td>
</tr>
<tr>
<td>No. (32) G 4910</td>
<td>14.28</td>
<td>1/7.29</td>
<td>1</td>
<td>..</td>
</tr>
</tbody>
</table>

Type (1 b):

(a) Room a: 2.07

(b-c) 4.49

Type (1 c):

9.4

1/2.44

2 to 5

24.96

3.99

9 chapels: Nos. 17-

Type (1 d):

9.15

1/2.87

1

5.58

5 chapels: Nos. 26-

Taking the total area, chapels of types (1 a) and (1 c) have an area of about 24 sq. m., while the two chapels of type (2 + 1 b) may be considered to have equivalent areas taking into account the stone chamber. The chapels of type (1 d), which are probably later, show a decided decrease to about 8.5 sq. m., resulting from their reduction to one room. The mean area of the offering-room shows a slight decrease also through types (1 a), (1 c), and (1 d). The mean proportions of the offering-room of type (1 a) correspond closely with the proportions of the early chapels of types (2) and (3). In chapels of type (1 c) the offering-room shows a slight broadening (1/2.44), while in the later examples of type (1 d) the single room shows the lengthening which was characteristic of Dyn. V.

The chapels of type (1 a) began without doubt in the reign of Cheops and ranged into that of Chephren, with some reconstructions as late as Dyn. V. The two chapels of type (2 + 1 b) were attached to two of the five initial cores of the nucleus Cem. G 4000 and were also probably of the reign of Cheops. All these c.b. chapels could have been and probably were constructed in a few days, and the original chapels were probably constructed at the time of burial in the great shaft. Thus one example of type (1 c) was dated to the reign of Chephren by the sealing found in the burial-chamber (G 4430, No. 21), and I would assign chapels of type (1 c) to the reigns of Chephren and Mycerinus. Most of the chapels of type (8 f) attached to interspersed mastabas were from the end of Dyn. IV. The single-room chapel of type (1 d) and the similar chapels of type (8 g) attached to interspersed mastabas appear to range from the end of Dyn. IV to Neferirkara of Dyn. V.

(e) Exterior c.b. chapels attached to stone chapels.

The chapels of types (1 a, c, and d) contained the only offering-place of the mastaba (except in annex mastabas). The two chapels of type (1 b) also contained an offering-place, but were attached to an exterior stone chapel of type (2 a) which may or may not have contained a separate offering-niche.
There remain a number of exterior c.b. chapels which contained no distinctly marked offering-place and were subsidiary to chapels of type (2), type (3), type (4), or type (5), which bear the following designations:

- Type (1 e): subsidiary to chapels of type (2).
- Type (1 f): subsidiary to chapels of type (3).
- Type (1 g): subsidiary to chapels of type (4).
- Type (1 h): subsidiary to chapels of type (5).

Type c.b. (1 e): subsidiary to exterior stone chapels of type (2). Examples: G 4140, G 4240; see type (2).

- Type c.b. (1 f): subsidiary to interior chapels of type (3). Examples: G 4150, G 1223, G 4710.
- Type c.b. (1 g): subsidiary to interior chapels of type (4). Examples: G 4940.
- Type c.b. (1 h): subsidiary to interior chapels of type (5). Examples: G 4000.

The subsidiary c.b. chapels provide rooms with functions similar to those of types (1 a–c) but lacking the offering-room. The most common rooms are the magazine and the vestibule; others were a sort of hall around the entrance to the offering-room, a statue room, and a court. Such exterior chapels are characteristic of important tombs and appear to have gone out of use at Giza about the beginning of Dyn. V, but this was probably due to the fact that the Giza mastabas of Dyn. V were usually small or intruded in areas crowded with mastabas.

2. Exterior Stone Chapels, Type (2) with One Niche

The exterior stone chapel occurs only in cased mastabas and is built around one of the niches, usually the S-niche of a two-niche mastaba. These chapels have the characteristic L-shape of all the Giza chapels. The ka-door or main offering-niche is at one end of the offering-room in the west wall, usually at the south end. The niche is a deep square compound niche with drum, cross-bar, tablet, and architrave. In the face of the casing towards the north end is a subsidiary niche of similar proportions, except that it is higher. The entrance doorway also has a drum, and usually an architrave, over the door. There are two completed chapels of this type and some others which may have been completed but are now so destroyed that their finished state cannot be determined.

The west wall of the exterior stone room is in most cases clearly the white stone casing of the core, but in two cases the casing was interrupted north of the chapel to leave a slab-stela exposed to view, and this stela was surrounded by a c.b. offering-room of type (1 b) (q.v.). Neither of these two rooms was sufficiently preserved to determine whether it was the main offering-room or a decorated room subsidiary to the c.b. room with slab-stela. Both were at the south end of the façade of the core. This form I mark as type (2 a) (see Figs. 102, 103). The others have a niche in the west wall which is either in the casing or built against the core, as far as can be ascertained in their present state. These I designate type (2 b). Only one example of type (2 b) has a slab-stela (G 4140). In this the stela was probably covered or intended to be covered by the casing (cf. G 1201, G 1223, and G 1225).

The list of chapels is as follows:

(a) Chapels of type (2 a)+(1 b):

1. G 4160: core type II b with unfinished y-casing; slab-stela; reserve head.
   Chapel: exterior room of white limestone: with c.b. chapel of type (1 b) against north end of stone room and built around slab-stela fixed in core wall:
   (a) 2.7 x 0.9 m.; area, 2.43 sq. m.; prop. 1/30.
   Chapel type (1 b): see above, No. 15.
THE FINISHED MASTABAS: CORES, CASINGS, AND CHAPELS

Total area: 21.45 sq. m.
See Fig. 102.

(2) G 4260: core type II b, cased with y-masonry; slab-stela.
Chapel: similar to No. 1:
(a) 3.35 × 1.05 m.; area, 3.52 sq. m.; prop. 1/3.2.
Chapel type (I b): see above, No. 16.
Total area: 18.97 (incomplete?).
See Fig. 103.

(b) Exterior stone offering-room, type (2 b):
(3) G 2110: core type II a, cased with y-masonry, finished; reserve head.
Chapel: exterior stone offering-room around south niche of casing; subsidiary north niche in casing:
(a) 3.7 × 1.15 m.; area, 4.25 sq. m.; prop. 1/3.21.
See Fig. 109.

(4) G 4140: core type III i, with unfinished y-casing; slab-stela; two reserve heads.
Chapel: exterior stone chapel of which only the foundation platform was preserved; apparently with two parallel N–S rooms:
(a) offering-room: 4.3 × 1.5 (?); 6.45 sq. m.; prop. 1/2.87.
(b) east of a, vestibule: 4.3 × 1.0 m.; 4.3 sq. m.
Measurements conjectural; north of stone chapel, a subsidiary c.b. chapel of type (I e); open court.

(5) G 4240: core type IV i, x-casing (unfinished); reserve head.
Chapel: exterior offering-room of x-masonry; niche near south end of west wall; built around south niche (subsidiary north niche in casing); door at north end of east wall: unfinished decoration:
(a) 3.62 × 1.55; area, 5.61 sq. m.; prop. 1/2.33.
Exterior c.b. chapel of four rooms: area, 20.52 sq. m.
Total area, a–e: 26.13 sq. m.
See Fig. 110.

(6) G 4340: core type IV i, x-casing (unfinished); reserve head.
Chapel: exterior stone offering-room, unfinished or destroyed; north of chapel G 4341, built against face of G 4340; only platform of stone chapel preserved; east of it, remains of exterior c.b. chapel.

(7) G 4440: core type IV i, x-casing destroyed; two reserve heads.
Chapel: exterior stone chapel nearly totally destroyed; remains of subsidiary c.b. chapel of at least three rooms.

(8) G 4640: core type IV i, with unfinished x-casing.
Chapel: exterior stone offering-room with niche at south end of west wall; door at north end of east wall:
(a) 3.9 × 1.4 m.; area, 5.46 sq. m.; prop. 1/2.79.
(9) G 4750: core type IV i, casing unfinished or destroyed.
   Chapel: exterior stone offering-room; niche on south; door on east:
   (a) 3.7 x 2.0 m.; area, 7.4 sq. m.; prop. 1/1.85.

(10) G 4840: core type IV i, uncased; (?) fragment of slab-stela probably from behind chapel; subsidiary north niche, monolith inset in core.

Chapel: exterior stone offering-room; niche on south; door in east wall:
   (a) 5.0 x 1.5 m.; area, 7.5 sq. m.; prop. 1/3.33.

Mean area of rooms a, 6 chapels: 5.32 sq. m.
Mean props., rooms a: from 1/1.85 to 1/3.33: mean, 1/2.75 (6 chapels).

Some of these mastabas of type IV had subsidiary c.b. chapels of type (I c) and it is probable that all had such chapels originally. In the Eastern Field a number of chapels of the interior stone type have subsidiary exterior rooms built of stone: G 7110+20, G 7310+20, G 7410+20, G 7130+40, G 7430+40, G 7050. All these are counted for the purposes of classification as interior chapels with subsidiary exterior rooms.
The Interior Stone Chapel of Type (3)

As has been explained elsewhere, the interior chapel, a cruciform chapel in c.b. mastabas, was developed by withdrawing the chief, southern niche, within the mastaba in order to protect its decorations. The first certain examples are in the reign of Khasekhemuwy and it was in general use in Dyn. III. At Saqqarah and Medum in the mastabas of the reigns of Sneferuw and Cheops, the interior cruciform chapel was in use (see Tomb Development, Chapter X). At Giza the chapel had an L-shaped offering-room either exterior or interior. The L-shaped offering-room appears first in the small c.b. mastabas of Tarkhan, where it was an exterior open-air chapel. In the subsidiary tombs of the Zoser complex the L-shaped stone offering-room appears definitely developed as an interior room. At Giza the earliest chapels with L-shaped offering-rooms appear with few exceptions to be exterior chapels, some of c.b. and some of stone. All the cores of the nucleus mastabas were constructed without niches and without any recess for an interior chapel, Cem. G 1200, Cem. G 2100, Cem. G 4000, the Echelon Cemetery, the twelve original cores in G 7000, and the ten cores in Cem. G I S. All these cores which were finished with interior chapels had that chapel built in a recess broken in the old core, or built in an addition to the core of masonry of type IV. The mastabas finished with interior chapels were those of more important persons, and include those of the largest size. The interior chapels of the mastabas cased in white stone were always of white limestone and some of the interior chapels in mastabas of type VI were also of white stone, although many of them were of grey stone like the retaining wall. The interior chapels which were built in additional core-work were as follows:

1. G 1201: core II a + IV iii; casing y; chapel (3) unfinished + (1 c); core of abnormal size; Prince Wepemnofret.
   (a) 4.9 x 1.85; area, 9.06 sq. m.; prop. 1/2-65.
   See Fig. 104.

2. G 1223: core II a + IV iii; casing y, unfinished; chapel (3) + subsidiary c.b. type (1 c); core of normal size; Prince Ka-m-aha.
   (a) 4.25 x 1.55; area, 6.59 sq. m.; prop. 1/2-74.
   See Fig. III.

3. G 1225: core II a + IV iii; casing y, unfinished; chapel (3) unfinished + chapel (1 c); Princess Nefert-yabet.

4. G 4150: core II b + IV iii; casing y, unfinished; chapel (3) unfinished (?); core of normal size; Prince Yuwnuw.

5. G 2210: core II a + IV iii; casing x, unfinished; chapel recess in additional core; probably intended for chapel type (3 a).

The additional core-work of these five mastabas was so constructed as to leave room for the interior chapel near the southern end of the eastern face. The mastabas in which the old original core was broken and altered, so that a recess for the interior chapel was created, were as follows:

6. G 2130: core II b; casing y (?); chapel (3 a) with subsidiary c.b. chapel; size of core abnormal; Prince Khent-ka (?).
   4.5 x 1.6 m.; area, 7.20 sq. m.; prop. 1/2-81.
   See Fig. 112.

7. G 2140: core II a of normal size, uncased; chapel type (3 a), inserted in break in core with unfinished inscription.
   (a) 2.65 x 1.1 m.; area, 2.91 sq. m.; prop. 1/2-4.
(8) G 7110+7120: twin-mastaba; two cores of type IV i joined with core-work of type IV; casing x; two chapels of type (3 a) (with special form of niche); core reconstructed with recesses for chapels; Prince Ka-wab and Hetep-heres II (?)?

7120 (a) 4.0 x 1.6 m.; area, 6.4 sq. m.; prop. 1/2.5.
7110 (a) partly destroyed, leaving the monolithic niche.

See Fig. 113.

(9) G 7210+7220: like No. 8; Prince Hordedef and his wife.

7220 (a) 4.15 x 1.65 m.; area, 6.84 sq. m.; prop. 1/2.51.
7210 (a) 4.3 x 1.6 (?); area, 6.88 sq. m.; prop. 1/2.67.

(10) G 7310+7320: like Nos. 1 and 9; Prince Ra-bauwf (?) and his wife.

7320 (a) 4.15 x 1.65 m.; area, 6.84 sq. m.; prop. 1/2.52.
7310 (a) 4.15 x 1.55 m.; area, 6.43 sq. m.; prop. 1/2.67.

(11) G 7410+7420: like Nos. 8-10; except that the remodelled cores were converted into type III ii by facing of small-stepped courses; Queen Meresankh II and her husband (?)?

7420 (a) 4.25 x 1.55 m.; area, 6.58 sq. m.; prop. 1/2.73.
7410 (a) 4.2 x 1.55 m.; area, 6.51 sq. m.; prop. 1/2.7.

(12) G 7130: northern part of twin-mastaba; core type IV i with added core of type IV iii on south; casing x unfinished; recess for wife chapels reconstructed in core IV i; type (3 a) with deep compound niche; Nefert-kauw, wife of Prince Khuufu-khaf.

7130 (a) 4.3 x 1.5 m.; area, 6.45 sq. m.; prop. 1/2.86.

(13) G 7430+7440: core type IV i/IV iii; casing poor x; chapel type (3 a) inserted in break in core IV i with exterior subsidiary stone and c. B. rooms: Prince Min-khaf.

7430 (a) 4.25 x 1.35 m.; area, 5.73 sq. m.; prop. 1/3.15.

The unrecessed cores of six of the twin-mastabas were altered to take chapels of type (3 a). Other cores in Cem. G 4000 and the Cem. en Echelon have been broken to admit chapels of type (3 a) and later chapels of type (4).
The cores constructed with recesses for an interior chapel of type (3) and intended to have such chapels *ab origine* are all in later positions in the cemeteries.

The examples are as follows:

(14) G 7140: twin-mastaba; southern addition of core IV iii; casing x finished; chapel (3 a) with one square compound niche and exterior stone chapel; Prince Khufuw-khaf.

![Plan](image)

![Section A-B](image)

![Section C-D](image)

Fig. 114. G 7140

(a) 4·15 x 1·65 m.; area, 6·84 sq. m.; prop. 1/2·51.

See Fig. 114.

(15) G 7240: southern addition of core IV iii; casing x unfinished, and finished with c.b. casing; interior chapel (3 a) of c.b.; with exterior c.b. chapel.

(a) 3·15 x 1·25 m.; area, 3·93 sq. m.; prop. 1/2·52.

(16) G 7340: southern addition of core IV iii; core not cased; interior chapel (3 a) of rubble and c.b.

(a) 3·95 x 1·5 m.; area, 5·92 sq. m.; prop. 1/2·63.

(17) G 7440: southern addition of type IV iii; casing poor x; the main chapel was inserted at the north end of east face; the recess in the southern end was packed with masonry and covered with
the stone casing in which a subsidiary offering-niche was set; with exterior chapel of u-masonry; Prince Min-khaf.

See Fig. 115.

(18) G 7530 + 7540: core type IV i, shifted southwards and extended by backed wall of type IV iv; casing of type X, dated to the 13th year of Chephren; interior chapel (3 b) with exterior stone chapel unfinished (?) built for Hetep-heres II but not used.

(a) 4:75 x 1:5 m.; area, 7:12 sq. m.; prop. 1/3:11.

(19) G 7450: core IV iii; no casing; interior stone chapel finished; type (3 a).

(a) 4:3 x 1:6 m.; area, 6:88 sq. m.; prop. 1/2:68.

(20) G 7350: core IV iii; casing y, finished; chapel (3 a) finished serdab; interior chapel type (3 a); Queen Hetep-heres II (?)?

(a) 4:25 x 1:5 m.; area, 6:37 sq. m.; prop. 1/2:83.

See Fig. 116.

(21) G 7050: mastaba type V; casing x, finished; chapel type (3 b) with exterior room; Queen Nefert-kauw (?)?

(a) 4:65 x 1:57 m.; area, 7:3 sq. m.; prop. 1/2:96.

The Cem. G I S, south of the First Pyramid, also presents three interior chapels of type (3 a), built in recesses broken in the cores:

(22) G I S No. 6: name not preserved; mastaba type VI x.

Core IV i with chapel recess broken out; chapel type (3) of white limestone; one shaft, type (3) (?) with turning recess; granite coffin uninscribed.

White casing dated by inscriptions to 2-6 years of Mycerinus; casing built by aperuw of Mycerinus.

(23) G I S No. 3: Prince Khufu-w-dedef, hry wdb nswt.

Core IV i with recess for chapel broken out; mastaba type VI z and x; chapel type (3) of white limestone bonded with interior casing (y); shaft type 3, blocking type I; inscribed granite coffin: shaft, 1:83 x 1:7-17:7 m.
(24) G I S No. 2: Ka-m-nofret, *tpy hr nswt*, [st] r n [nswt].

Core IV i, with recess broken in core; mastaba type VI y; chapel type (3), white limestone; shafts (two), type 3, with turning recess; granite coffin inscribed; north shaft of type 7 x (2 m. shaft, 9.5 m.).

Date, probably Mycerinus.

In the Western Field two cores, one in Cem. G 4000 and the other in Cem. en Echelon, have also been broken out to contain interior chapels of type (3 a):

(25) G 4710: Sethuw, *smr wtry hpr rhr, hry sâv n pr dmrt, hry tp Nḥb, hry wdb h-t rnh*.

Core type IV i; mastaba type VI a; chapel type (3 a) with white limestone walls; shaft type 4 a (2) x; limestone coffin.

The nummulitic mastabas with one-niched chapels are as follows:

(26) G 7550: 'Prince' Duwanehor.

Mastaba type VI a; chapel type (3 a), of nummulitic limestone, decorated; two shafts, types 3 amx, and 6 b (2) (unfin.).

Son of Ka-wab and Hetep-heres II (†).

(a) 4.7 x 1.6 m.; area, 7.52 sq. m.; prop. 1/2.94.

See Fig. 118.

(28) G 7660: 'Prince' Ka-m-sekhem.

Mastaba type VI a; chapel type (3 a); two shafts, types 3 afx (two rooms: gran. sarc.), and 3 cl.

Son of Ka-wab and Hetep-heres II (†).

(a) 4.52 x 1.53 m.; area, 6.17 sq. m.; prop. 1/2.85.
(29) G 7760: 'Prince' Min-dedef.
Mastaba type VI a; chapel type 3 a, of nummulitic limestone, decorated; two shafts, types 3 al
(two rooms: gran. sarc.) and 3 bfx.
Son of Ka-wab and Hetep-heres II (?) .
(a) 4.52 x 1.53 m.; area, 6.91 sq. m.; prop. 1/2.95.

(30) G 7750: name destroyed.
Mastaba type VI a; chapel type (3 a), of nummulitic limestone, decorated; two shafts; chief
shaft with two chambers, type 3 am and unfinished; second shaft, type 3 bf.
Probably also a son of Ka-wab and Hetep-heres II.
(a) 4.4 x 1.56 m.; area, 6.86 sq. m.; prop. 1/2.82.

(31) G 7060: Prince Neferma'at.
Mastaba type VI a; chapel type (3 b), of nummulitic limestone; decorated; chief shaft type
4 b (4) x.
Probably son of Cheops and Nefert-kauw.
(a) 4.25 x 1.6 m.; area, 6.8 sq. m.; prop. 1/2.65.
See Fig. 119.

(32) G 7070: ss nisit Sneferuw-khaf.
Mastaba type VI a; chapel type (3 b), of nummulitic limestone; partly decorated; two shafts;
chief shaft, type 4 b (4) x.
(a) 4.25 x 1.6 m.; area, 6.8 sq. m.; prop. 1/2.65.

(33) G 7820: Princess Nefert-kauw and her husband Iy-nefer (?) .
Mastaba type VI a; chapel type (3 a), of nummulitic limestone; decorated; two shafts, types 3 af
and 4 b (I).
Possibly daughter of Queen Meresankh II.
(a) 4.25 x 1.57 m.; area, 6.67 sq. m.; prop. 1/2.7.

(34) G 7810: Prince Zaty.
Mastaba type VI a; chapel type (3 a), of nummulitic limestone; decorated; shafts, types 3 bf
and 3 afx.
Possibly son of Queen Meresankh II.
(a) 4.2 x 1.5 m.; area, 6.3 sq. m.; prop. 1/2.8.
(35) G 7560: south of 7550; name not preserved.
Mastaba type VI a; chapel type (3 a), of white limestone; decorated; shafts types 4 b (1) x and 7 x.
(a) 4.4 x 1.55 m.; area, 6.82 sq. m.; prop. 1/2.84.

(36) G 7670: south of 7660.
Mastaba type VI a; chapel type (3 a) of white plastered c.b., with exterior c.b. chapel; shafts types 3 bf and 4 b (1).
(a) 4.1 x 1.5 m.; area, 6.15 sq. m.; prop. 1/2.73.

Two outlying mastabas in the Western Field are to be added:
(37) G 1457: Nesuwt-nefert (sic), rḫ nswt, hm nṯr Hwsw, imy-rś jšt-hwsw (town), ḫrḥ wrb nswt, ḫm-rś wḥt nswt ḫrḥ ššt n nswt.
Mastaba type VI e (1); area, 205.8 sq. m.; on independent site west of Cem. G 1200; chapel type (3 a); two shafts, types 4 b (1) and 3 bm (6.67 sq. m.).
Sealing of Mycerinus.
(a) 2.8 x 1.28 m.; area, 3.57 sq. m.; prop. 1/2.19.

(38) G 1109: name lost but wife’s name Meryt-ib, ḫm nṯr Ht-hr, rḥt nswt.
Mastaba type VI e, twin; area, 142 sq. m.; on independent site between G 1201 and G 1020; chapels, two of type (3 a) with exterior corridor chapel of type (5 x) and magazine; eight shafts: two chief shafts are of types 6 b (2) and 6 a (2) with areas of 2.0 sq. m. or a little more; both chapels of same size.
(a, d) 1.6 x 0.55 m.; area, 0.88 sq. m.; prop. 1/2.9.

Examples of one-niched chapels occur also in the mastabas of the secondary cemeteries but not in great number. Some of these not in mastabas with subsidiary north niche are listed later under chapel type (4 b). I give here reference to two one-niched chapels of later date with subsidiary north niche.
(39) G 7152: mastaba type VI a or VIII a; on independent site; chapel is an abnormal variation of type (3 a) with one niche, a shallow ‘false door’ stela at the south end of the west wall and opposite the entrance doorway; decoration of mixed character; two shafts, types 5 b (2) and 6 b (3).
Husband of a princess; offering formula in name of Osiris.
(a) 4.5 x 1.43 m.; area, 6.43 sq. m.; prop. 1/3.15.

(40) Selim Hassan, Gisa, I, p. 62; Meruwka.
Mastaba type VI c; chapel type (3) with great door niche on south; subsidiary northern niche; one shaft, type 5 b (1).
(a) 4.2 x 1.55 m.; area, 6.51 sq. m.; prop. 1/2.7.

All the chapels of mastabas of type VI were constructed in one operation with the construction of the retaining wall, as were the interior chapels of all mastabas of w-masonry, whether original filled mastabas or cased mastabas built around an old mastaba-core of the royal cemeteries. The chapels of these mastabas present both the two-niche and the one-niche form.

I have divided the interior L-shaped chapels at Giza into two types, those with one-niche offering-room (type 3), and those with two-niche offering-room (type 4). The exterior c.b. chapels and the exterior stone chapels attached to royal mastaba-cores are also of the one-niche type. It is to be remembered that while the chapels of type (1) are built around the slab-stela or an exposed vertical strip of the retaining wall of the mastaba, the later c.b. chapels derived from it (type 8 f) are built around one of the niches in the face of the mastaba. Chapels of type (2), exterior stone chapels, are in the earlier forms
THE FINISHED MASTABAS: CORES, CASINGS, AND CHAPELS

The mastabas with one-niche rooms include all those with exterior chapels in the royal cemeteries, chapels of type (1) and (2). The chapels of type (1) have the simple c.b. niche as those with slab-stela spoken of above. The chapels of type (2) have the square compound niche which was that generally used also in the interior chapels of type (3 a). But four or five of the chapels of type (3) have in the middle of the west wall a more shallow compound niche set in palace-façade panelling, and this variation is labelled type (3 b). Chapels of type (3 b): Nos. 18 (G 7530+40), 21 (G 7050), 31 (G 7060), and 32 (G 7070). With the exception of two mastabas in the Western Field all the cores of the original royal cemeteries have one-niche chapels. Two of the mastabas of the early additions to Cem. G 7000 have two-niche offering-rooms. All the other original cores which have two-niche offering-rooms, such as G 2150 and G 4520, can be proved to have been reconstructed after the reign of Mycerinus. The later mastabas of the transition period between Dyns. IV and V, with rare exceptions, all have two-niche rooms. Thus the introduction of the two-niche room becomes of importance, and the four older mastabas with this chapel type (4) require special examination. The date of the transition from one-niched to two-niched chapels is approximately marked as the latter part of Dyn. IV. It is highly improbable that the change took place suddenly so that we could mark a point in time before which all chapels were one-niched and after which all chapels were two-niched. The scrutiny of the examples proves that the two-niche chapel was used in five mastabas previous to the reign of Mycerinus. These chapels belonged to a queen of Cheops, three princes of the royal family, and to a queen or a princess. Two of the mastabas concerned are the two enormous mastabas, G 2000 in the Western Field and G 7510 in the Eastern Field. In the large mastabas after the reign of Mycerinus the chapels were usually the two-niched chapels of type (4 a) down to the end of Neferirkara. The transition from the prevailing one-niched to the prevailing two-niched chapel occurred in the reign of Mycerinus and is best observed in the rock-cut chapels of the members of the family of Chephren in the old Cheops-Chephren quarry. After Neferirkara, in chapels of (4 b), (5), (8), and (9), the two-niched offering-room occurs frequently but accompanied by offering-rooms with one niche, several pairs of niches, or an irregular arrangement of the niches. In the chapels of type (7) the main offering-room was one-niched but other offering-rooms occur subsidiary to the one-niched room.

(4) Early Two-niched Chapels and Chapels of Type (4 a)

(a) Early chapels.

There are five two-niched chapels which I date to a period previous to Mycerinus. One is a pyramid chapel, one is a corridor chapel of type (5), and the other three are chapels of type (4 a), as follows:

(1) G I-b: second small pyramid of a queen.

Stepped core, filled and cased with x-masonry; small cruciform temple of white limestone in middle of east face; offering-room with two compound niches in vertical west wall; entrance in middle of east wall with small vestibule; burial-shaft of the sloping-passage type of the Giza pyramids; anteroom connected by sloping corridor with large chamber lined with masonry.

(a) 10.5 x 2.1 m.; area, 22.05 sq. m.; prop. 1/5.5. See Fig. 120.

(2) G 4000 (Junker): Prince Hemyuwnuw.

Core type II b+IV iii; mastaba type VIII x, cased with fine white limestone; chapel type (5 a)
of white limestone; two shafts, type 1 arx and an unfinished and unlined chamber intended to be of the same form but finished as type 3 brx (unfin.).
(a) 36.9 x 1.56 m.; area, 57.56 sq. m.; prop. 1/23.66.
See Fig. 121.

(3) G 2000: member of the royal family.
Core type III b; with two chapel recesses, of which the south was used and north was walled up with subsidiary north niche in facing; casing of white limestone begun but not finished; chapel type (4 a), of white limestone, destroyed to foundation; one shaft of type 2 alx (ramp), in position of man's shaft in the two-shaft mastaba.

Plan

(a) 4.5 x 1.75 m.; area, 7.87 sq. m.; prop. 1/2.57.
With exterior c.b. chapel.

Chapels of the six massive cores built after the twin-mastabas of Cem. G 7000.

(4) G 7510: Prince Ankh-haf.
Core type IV iii; mastaba type VII x; chapel type (4 a); one shaft in the position of the man's shaft; type 2 amx (ramp).
First mastaba east of the nucleus cemetery.
(a) 7.55 x 1.65 m.; area, 12.5 sq. m.; prop. 1/4.58.
See Fig. 122.

(5) G 7650: Queen Merytyetes (?), Akhet-hetep, and Princess Merytyetes.
Core type IV iv; mastaba type VII x; chapel type (4 a); three shafts; types 3 afx (gran. sarc.), 7 x, and 3 amx.
By position next in date to G 7510.
(a) 6.0 x 1.7 m.; area, 10.2 sq. m.; prop. 1/3.53.

No. 1 was undoubtedly of the reign of Cheops. I assign No. 2 (Hemyuwnuw) to about the same time. No. 3 was also made about the end of the same reign, while Nos. 4 and 5 may be safely assigned to the reign of Chephren.