

ARTH 623. Art and Architecture of Ancient Egypt  
Ömür Harmanşah  
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ARCHITECTURAL SYMBOLISM  
IN THE FUNERARY COMPLEX OF DJOSER (HORUS NETJERYKHET)  
AT SAQQARA

*1. Introduction: Reading the Funerary Complex*

The funerary complex of Djoser (Horus Netjerykhet)<sup>1</sup> was built on the Saqqara plateau, west bank of the Nile, on top of a wide and shallow promontory that overlooked the ancient settlement of Memphis on the other side of the bank<sup>2</sup> (Figs 1). Memphis was known as “the Balance of the Two Lands”, geographically dividing the nomes of Upper and Lower Egypt (Kuhrt, 151). Throughout his nineteen years of reign (2630-2611 BC), Djoser undertook the construction of this monumental compound at the heart of the land of Egypt, with the accompaniment of his famous architect Imhotep, “Chancellor and Great Seer (i.e. high priest) of the Sun God Ra”<sup>3</sup>. Along with the earlier archaic mastabas, the monumental complex formed the funerary counterpart of the mundane life at Memphis.

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<sup>1</sup>The name Djoser was not attested before the Middle Kingdom and mainly known from the ‘wall scribblings’ of the Eighteenth dynasty visitors to the complex, which was already a site of pilgrimage at that time. The third dynasty inscriptions refer to him with his Horus name Netjerykhet . Hawass, 45; Edwards, 1971, 145.

<sup>2</sup>the Step pyramid complex was excavated by C.M. Firth and J.E. Quibell of the French Institute of Oriental archaeology at Cairo, between 1924 and 1933. Jean-Pierre Lauer, who joined the archaeologists in 1926 as a young architect, devoted most of his life to the excavations and publishing of the monument. Site reports were published both in English and French: See C.M. Firth & J.E. Quibell & Jean-Pierre Lauer. *Excavations at Saqqara: the Step Pyramid*. . Cairo: L’Institut Français D’Archéologie Orientale, 1935. Also, J.-P. Lauer. *Fouilles À Saqqarah. La Pyramide À Degrés: L’Architecture*. Cairo: L’Institut Français D’Archéologie Orientale, 1936.

<sup>3</sup>Imhotep (Imhoutes, for the Greeks) was deified as the prototypical architect , as a sage and patron god of medicine in the Ptolemaic/Greco-Roman period, and was known as a scribe, astronomer, healer as well as being the author of “the Book of Foundation for Temples”. Kostof, 1977,6. His name was read in an inscription on a statue base of Djoser which was found in situ in the columned processional entrance hall of the complex. Smith, 55. The Egyptian chronicler manetho mentioned him as “the inventor of the art of building with hewn stone”. Quoted in Baines & Malek, 142.

The rectangular layout of the funerary complex was defined by a dry-moat on the outside<sup>4</sup> and on the inside, a niched limestone enclosure wall (544 x 277 m, 10.5 m ht.), punctuated with paneled bastions, fourteen false gates and one true gate to the south-east (Figs 2-3)<sup>5</sup>. Two royal tombs were housed within two complicated set of underground structures of similar plan layout; one topped by the Step Pyramid, and the other below the South tomb, which was basically a monumental mastaba (fig 4). The architectural similarity of the two subterranean chambers is associated with a multiple burial of the same ruler<sup>6</sup>. To the south of the Step pyramid was the Great Court, which was the widest open air court, approached from south-east by the entrance hall. This monumental hall way was constituted with forty engaged ribbed columns. To the north of this hall lay the so-called Heb-Sed court with its twenty-five to thirty monumental stone shrines with no interior that housed a variety of divinities, "Followers of the Horus". The North Building and the South building to the East of the Step Pyramid, represented shrines for the Upper and Lower Egypt goddesses, Nekhbet and Wadjet (Arnold 1997, 42). Associated with the Pyramid to the North is the serdab of Djoser and its court, as well as the less known Northern temple<sup>7</sup>.

This colossal undertaking which incorporated the earliest wide-scale use of cut-stone masonry in a complete building program and the innovation of the so-called Step Pyramid, marks an important turning point in Egyptian history. Being the second king of the Third Dynasty<sup>8</sup>, Djoser was able to channel the economic power of the royal institution, accumulated already by his time through the gradual unification of the Upper and Lower Egypt and the management of its agricultural resources, into a gigantic architectural project for his funerary cult. The symbolism of this unification of the two lands of Egypt is attested in the architecture of the complex and discussed below. A variety of both

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<sup>4</sup> Width 40 m. depth 26 m. leveled at the bottom with masonry. The function of this moat is obscure. See Swelim, 1988. The plan of the moat is identical to the hieroglyph, that denoted "battlement enclosure" or "reed shelter in the fields" *ibid.*, 13.

<sup>5</sup>The masonry of the wall is in imitation of mud brick work with small-cut stones. Lehner indicates that the recesses were not formed at the construction, instead they were *carved* after the massive masonry was laid out, which must have been an enormous task itself. 84.

<sup>6</sup>Arnold, 1997, 40. Lauer, 1935, 54-64.

<sup>7</sup>For detailed account of the architectural features of the complex, see Lauer, 1935, vol.1 text; Firth et. al., 1936; Lauer 1951; Edwards, 53ff.

<sup>8</sup>The first king of the Third Dynasty is believed to be (possibly the brother of Djoser), Sanakhte (or Nebka), who ruled between 2649 and 2630. Not much is known about him. Edwards, 1971, 146; Baines & Malek, 32.

technical and formal innovations were incorporated into its structure that augmented its significance; the most important being the Step Pyramid. In its metaphorical architectural vocabulary, it is possible to read both the earlier architectural traditions at Abydos, Saqqara and elsewhere; and the ritual/funerary practices that it was meant to accommodate. On the other hand, the complex itself had undergone a piecemeal development through Djoser's reign and even perhaps shortly after, as exemplified in the six stages of construction of the Step Pyramid (Fig.3: Step pyramid construction stages). Therefore the architectural innovations were gradually incorporated into the structure, along the long process of its construction.

The present study aims to address certain issues related to the function and meaning of Djoser's funerary complex. It has been suggested that first and foremost, it was a temple [compound] for the funerary cult of Djoser, that housed his tomb and other structures, both those which were used for the funerary-ritual purposes and those that served for the king's afterlife (Smith, 54). Therefore along with the performing of the royal ceremonies, the erection of the monuments themselves, with their metaphorical vocabulary, "transformed the king into a divine being"<sup>9</sup>. As the burial place for the king, the royal cult complex was the eternal residence for the *ka* and the *ba* of the king and its architecture essentially alluded to the contemporaneous palatial structures<sup>10</sup>. The main rites "that transformed the human and mortal king into an immortal and divine being" were primarily the *Sed* festival and the royal *ka*-statue rites (Arnold, 1997, 31). The funerary complex provided a spatial framework for those rites. According to B.J. Kemp, comprising a temple for the royal statue(s) and the adjoining tomb, the funerary complexes acted as "a huge reliquary, [and] gave enormous authority to what was, in essence, an ancestor cult and an important factor in the stability of the government"<sup>11</sup>. The multi-layered meaning of the funerary complex of Djoser develops from this intermingling of religious,

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<sup>9</sup>See Byron E. Shafer (1997), "Temples, Priests and Rituals: An Overview" in Temples of Ancient Egypt. Ed. B.E. Shafer (New York); 1-30, for the quotation p.2.

<sup>10</sup>See Lehner, 23, for the *ka* and the *ba* of the king. Also Lanny Bell (1997), "The New Kingdom Divine Temple: The Example of Luxor" in Temples of Ancient Egypt. Ed. B.E. Shafer (New York); 127-184. Also Lanny Bell (1985); "Luxor Temple and the Cult of Royal *Ka*", Journal of Near Eastern Studies 44: 251-94.

<sup>11</sup>Barry G. Kemp (1996), "Old Kingdom, Middle Kingdom and Second Intermediate Period" in Ancient Egypt: A Social History, B.G. Trigger et. al (eds.) (Cambridge); 71-182, for quotation, p. 85.

ideological and economical functions, which were elaborately rendered with the peculiar vocabulary of its architecture, to be examined below.

## ***2. The earth-mound and the stone-mound: Mastaba origins of Djoser's funerary complex***

Recent scholarship has focused attention on the origins of Djoser's Step Pyramid complex in the Early Dynastic royal tombs at Abydos, nobles' mastabas at Saqqara and temple at Hierakonpolis<sup>12</sup>. Excavations made clear that the Step Pyramid was built in six stages starting with a square<sup>13</sup> limestone mastaba (see fig 5. Lauer, 1935, 86). The idea of a well-proportioned step pyramid was only achieved in the fourth phase, as a major leap, both in the overall form of the structure and the construction technique. As the successively enlarged mastaba was converted into a 4-stepped pyramid in Lauer phase P1, they incorporated a new masonry technique, abandoning the horizontal courses, and "setting rectangular casing blocks at an inward slope", in accretion<sup>14</sup> (fig. 6). The size of the stones were also enlarged and the large amounts of the mortar of tafla was no longer needed. The central core was formed "by 13-14 accretion layers with inclined faces, which were reduced in height from inside out in a step-like fashion" (Arnold, 1991, 159). This peculiar masonry technique, that exhibited a heightened concern for stability was abandoned in the Fourth Dynasty pyramids at Giza.

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<sup>12</sup>Most comprehensive survey and un-biased critical discussion of the issue in Lehner, 73-81. On Abydos, most updated esp. O'Connor, 1989 and 1991. For a counter argument, Stadelmann, 1996. See also W. Kaiser (1969), "Zu den königlichen Talbezirken in Abydos un zur Baugeschichte des Djoser-Grabmals", Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo 25: 1-22. A response to this article is Hartwig Alltenmüller (1972), "Bemerkungen zur frühen und späten Bauphase des Djoserbezirkes in Saqqara", Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo 28: 1-12; Rainer Stadelmann (1996), "Zur Baugeschichte des Djoserbezirks: Grabschlacht und Grabkammer der Stufenmastaba", Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo 52: 295-305.

<sup>13</sup>Earlier mastabas were oblong in plan, and the square plan of the early mastaba of Djoser was already an innovation. Lehner, 84.

<sup>14</sup>See Arnold 1991, 159; Lehner, 84. In the fourth dynasty pyramids the outer faces of horizontally laid casing blocks were dressed at an oblique angle. The masonry technique at Djoser's Step Pyramid was also used in the Medum pyramid of Huni, as well as Sneferu's Bent Pyramid at Dahshur. Edwards 1971, 157.

This stone mound of Djoser had earthen-mound precedents. The royal tombs at Abydos consisted of a subterranean chamber with many small mudbrick chambers, as a replica of a house in plan, which was roofed with timber, covered with matting and mud (Lehner, 75-77). Earliest tombs of this type apparently did not have much outstanding structure other than a very shallow mound<sup>15</sup>. First and Second Dynasty tombs incorporated a monumental rectangular court, which “simulated wood-frame and reed-mat structures in plastered and painted mudbrick” (Lehner, 76). Moreover, O’Connor’s excavations at the Second Dynasty tomb of Khasekhemwy revealed both traces of a mud plaster floor at the edge of which “bricks were laid at an angle”<sup>16</sup>. This suggests that the Khasekhemwy tomb had a prominent brick-skin superstructure. The burial chamber of this tomb was built of limestone rather than mudbrick while King Den’s cenotaph already had an Aswan granite floor (Aldred, 45).

If one assumes that the enclosure wall of the Step Pyramid complex is contemporary with the earliest mastaba<sup>17</sup>, the overall layout of the Djoser’s mastaba in relation to its enclosure and the location of the entrance to the compound is very similar to the Khasekhemwy tomb (Fig 7). However the scale of Djoser’s monument is gigantic in comparison to any of the Early Dynastic tomb structure.

The archaic mastabas at Saqqara also had niched façades, construed of yellow painted wood-imitation recesses and geometrically decorated, woven-mat imitation broad projections. Scholars see an visual allusion to the predynastic wood-frame/woven reed-mat shrines *Per Wer* of Upper and *Per Nu* of Lower Egypt (Lehner, 79). A *Per Wer*, ‘Great House’ shrine, possibly of wood and reed matting, was attested at Hierakonpolis that was surrounded by a mudbrick enclosure wall and a central circular mound (Fig.)<sup>18</sup>. In Djoser’s funerary

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<sup>15</sup>This was the result of the German Institute of Archaeology Excavations at umm el-Qaab. Stadelmann, 791, note 23. Also O’Connor, 1991, 7. Stone stelae with the name of the ruler, were erected in front of the mounds.

<sup>16</sup>O’Connor, 1991, 7. They also found numerous boat graves associated with this structure, predecessors of the boat graves in Giza pyramid complexes.

<sup>17</sup>Lehner points out this possibility, in the line of Werner Kaiser. See above footnote 8. Lehner, 84.

<sup>18</sup>Lehner 72-3. The famous narmer slate palette was found deposited within this sacred enclosure, where a Middle Kingdom temple was built. representations of such shrines were also attested in the cylinder seals, ebony and ivory tablets of the time. See Shafer, 4.

complex these two shrines of the Upper and Lower Egypt finally found their stone expression in the East Court of the complex. The closest parallel to Djoser's Step Pyramid among Saqqara tombs seems to be the mastaba 3038 of Anjib. The 6 m high mudbrick superstructure of this mastaba was built in 8 shallow steps, which was later buried in sand with the building of the niched enclosure wall all around it (Lehner, 80).

The master craftsmen of Djoser's funerary complex have clearly built upon the traditions and the tectonic vocabulary of all forms of architecture (funerary, temple or domestic) in Upper and Lower Egypt before the Third dynasty, with a sophisticated material trope alluding to primordial forms of building: the primordial hut as shrine, and the primordial mound, as "the fertile land from which all creation grew" (ibid, 72). The transition from an earth-mound to a stone-mound is significant however, since the Tura limestone brought a totally new constructional aesthetics and meaning. Stone took over the formal vocabulary of mudbrick, wood, reed and such perishable materials, as a material trope. The limited accessibility, the amount of labor required for the quarrying, transport and the working of the stone made it a token of the pharaoh's power and ideology.

According to Kenneth Frampton, the construction technique has an expressive potential that enriches the idea of space with its tectonic and tactile character (Frampton, 1995, 2ff.). The scenographic and visual dominance of the material quality of built form provides a spatial displacement of the viewer in time. Apart from the strong connotations of stability, permanence and eternal endurance of stone, Linzey points to the association of house and stone, as well as the city and stone, in the classical world. The funerary complex of Djoser was not only the eternal house for the king, but also a simulacral image of the Two Lands of Egypt. Aldred sees the complex as "a vast city of the dead, a kind of funerary replica of White Walls [Memphis], the capital founded by Menes four centuries earlier... [with] palaces, national shrines and jubilee courts" (Aldred 1980, 50). In contrast, its gigantic scale and massive proportions removed the monument from its everyday-life connotations, and reshaped this visual forms of the Egyptian collective memory into the ideological structures of divine kingship.

### *3. The Sed festival and the ritual orientation of the funerary complex*

The Early Dynastic royal tombs which received wide courtyards with the incorporation of monumental niched enclosure walls, are believed to have accommodated the performance of funerary ceremonies<sup>19</sup>. Stadelmann suggests that throughout Dynasties I and II, there was an increasing demand for the elaboration and expansion of these compounds, due to the developments in the funerary and cultic traditions (Stadelmann, 797). The provision of a substantial everlasting spatial structure for the royal burial and the royal rituals was only possible with Djoser's funerary complex built at the outset of the Third Dynasty, when "an essential change in the religious consciousness" was attested (ibid 798). The Sed festival, which was believed to have granted the king, the renewal and regeneration of his divine powers at the presence of the gods and priests of the unified Egypt, was one of these rites which received a substantial stage-set in the funerary complex of Djoser<sup>20</sup>. The festival was enacted normally on the thirtieth year of the reign of the king and triennially afterwards, although idiosyncracies were attested in various kings. Although Djoser is considered to have ruled only 19 years, the reliefs in the burial chambers of the Step Pyramid and the South Tomb (Fig. 10) bear the evidence that he must have celebrated the festival in his lifetime (Friedmann, 1995, 8).

Dieter Arnold has recently brought the discussion of "the fortress of the gods", known from the Palermo stone and inscriptions on stone vessels, in his discussion of the Old Kingdom royal complexes (Fig.8 Arnold 1997, 34ff.). They were gathering places for the gods, who "were predominantly divine powers who appeared in animal and other shape... [and] known as the  $\Sigma msw-hr$ , the Followers of Horus" (ibid 34). In its hieroglyphic form, the Fortress of the Gods was always represented within paneled walls enclosing a great empty court and a palace. Followers of Horus had a vital role in the Sed ritual from the beginning to the end; they accompanied the rejuvenation of the king. Their arrival from various regions of Egypt by boats marked the beginning of the festival<sup>21</sup>. Eric Uphill (1965) reconstructed the various stages of the festival from the reliefs of the Fifth Dynasty sun temple at Abu Gurob and the much later King Osorkon II's

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<sup>19</sup>Dieter Arnold sees this to be unlikely, see Arnold, 1997, 34. Footnote 12 in p. 258 for references to this hypothesis.

<sup>20</sup>For an elaborate discussion of rituals, see Shafer in Shafer, 1997, 18-28. Also Murnane, 1981; Uphill, 1965.

<sup>21</sup>Uphill 369. The function of the boat graves that accompanied the early dynastic mastabas and fourth dynasty pyramid complexes should be considered in these terms.

reliefs at the temple at Bubastis. The preparations for the Sed festival comprised the building of the necessary buildings for the festival which included a palace for the king to be used during the festival and small wooden pavilion shrines for the gods of Egypt, which were probably modelled upon the primeval-hut shrine of the Hierakonpolis enclosure.

It is beyond the limits of the present study to trace the architectural function of each structure in Djoser's funerary complex, in relation to the textual and visual sources that render the Sed festival in detail<sup>22</sup>. However a critical evaluation of the issues discussed in the above paragraph makes it possible to begin to understand the underlying design principles in the overall architectural layout of Djoser's funerary complex. First of all, the solid chapels that were arranged in two rows flanking the Heb-Sed court acted as the shelters for the Followers of Horus (Fig. 9). In terms of their façades, three kinds of designs were attested: a flat-roof type with a simple cavetto cornice, a slightly curved roof type with a fan-shaped cornice and lastly a similarly curved roof type with slender fluted pilasters and an architrave (Lauer, 1935, 10-13). These simulacral shrines that were meant to function to house the cult images, also create a continuous repetitive and impressive fine limestone façade which must have acted as a stage-set for portions of the Sed ritual performances, with their formal allusions to the regions of the land of Egypt<sup>23</sup>. A monumental platform with a double throne on top was built at the southern end of the court. This must have acted as a base for the well-known 'baldachino' or the 'pavilion' of the king, where he makes his royal appearance before he visits "the assembled gods and goddesses" and is recrowned as the king of the Lower and Upper Egypt<sup>24</sup>.

Six limestone relief panels were found in the burial chambers of the Step Pyramid and the South Tomb that depict Djoser performing the Sed festival (Fig.10). Florence Dunn Friedman has recently studied the meaning and function of these reliefs in relation to the Sed festival rites and the architectural context of the funerary complex (Friedman 1995 & 1996). She has convincingly suggested that the total six panels (three from the Pyramid, three from the South Tomb) formed one complete narrative that illustrate him as he "stands in the shrine of

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<sup>22</sup>Although I do believe that it can be a very interesting project, to be pursued in the future.

<sup>23</sup>It was also suggested that the door like niches of the shrines contained statues of Djoser. Friedmann 1995 & 1996. Seven statues of Djoser was found in the area. See Arnold 1997, 43.

<sup>24</sup>Uphill, 372. Also Arnold, 1997, 43; Lauer, 1935, 11.

the gods, runs the ritual race [‘Circuit of the Wall’ ritual ?], seizes the two lands, possesses the two skies, and stands as eternal monarch of Egypt” (Friedman 1996, 339-40).

What was presented in Djoser’s relief panels is a visually abbreviated representation of the central vital episode of the Sed rituals. After the king’s symbolic disappearance in his tomb [symbolic death of the aged-king], he appeared again and “demonstrated... his reinvigorated self by running three or four laps of a ceremonial course” (Shafer 1997, 27). His running around his residence was also an expression of his reclamation of kingship and of authority over the land of Egypt. Friedman has also suggested that the placement and orientation of the reliefs and the depictions of Djoser in the underground chambers had a direct spatial relationship with the actual space used for the ritual<sup>25</sup>. Her conclusion that the reliefs depict not Djoser himself but his statues as placed in the niches of shrines of the Heb-Sed court, seems to be an overinterpretation. There is no satisfactory evidence to restore Djoser’s sculptures in these niches, which seem to be intended for cult images of divinities. She supports her idea only on the basis of the orientation of the body, while there is no reason to see a moving figure as a representation of a statue.

Boundary markers were found both in the Great Court and the Heb-Sed court of the complex, around which Djoser was thought to have run his ritual race. These semi-circular shape structures were also depicted on the reliefs themselves as hieroglyphic signs. Spencer suggests that the word *dnbw*, which was used for these boundary markers, was developed into the general meaning to denote “the boundaries and limits of a land” or later “the sandbank, bank [of the Nile]” (Spencer, 53). The boundary markers of the Sed ritual were associated with broad courtyards, called *whst*, for which the Great court and the Heb-Sed court of Djoser’s funerary complex, where such boundary markers were found, should be good paradigms. The hieroglyphic sign for *wsht*- broad courtyards

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correspond to the shape of the dry moat that surrounds Djoser's funerary complex<sup>26</sup>.

Although Sed-festival was practiced from Early Dynastic period down to the late periods, many of its aspects remain unknown to the scholarship, including its exact sequence<sup>27</sup>. The problems of architectural symbolism for the funerary complex of Djoser still remain unresolved partly due to their uniqueness. The later step pyramids, which formed the basis for the great pyramid complexes of the Fourth Dynasty, abandoned incorporating the whole set of buildings within the enclosure wall other than the pyramid, the subsidiary tomb, and the mortuary temple. Nevertheless, it is evident that the architectural setting and embellishment of the complex, as much as its formal vocabulary was shaped in direct reference to the requirements of the Sed-festival. Even the making of the reliefs were among these requirements that had to be completed just prior to the celebration of the festival. Through the ritual and the erection of the monuments essential for the performance of the rituals, in the physical body of the ruler, the power and vitality of the state was enhanced. The well-being of the two Lands of Egypt was restored with their symbolic unification in the architecture and ritual practices in the royal realm.

#### *4. Architectural metaphor*

The formal vocabulary of Djoser's funerary complex, its architectural *decorum*, i.e. the appropriate use of forms and materials, makes it possible to function in relation to its intended use. So far I have been dwelling on the general design principles of the monuments. In the last section of the study, it is useful to return to the idea of the architectural metaphor. The simulacral form and the material imitations in Djoser's funerary complex has so far been generally discussed either in terms of the direct imitation of forms of nature, or the craftsmen's technical incapability of adapting appropriate and honest use of the new material, i.e. stone. In contrast, both the formal allusions to nature, and the

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<sup>26</sup>See above page 1 and related footnote for the discussion of the dry moat.

<sup>27</sup>Shafer mentions that perhaps this mystery was intended by the Egyptian kings. see Shafer, 1997, 27. About the debates on the Sed-festival see William Murnane 1981. Here he discusses hypothesis brought by Erik Hornung & Elisabeth Staehelin, "Studien zum Sedfest", *Aegyptiaca Helvetica* I (Geneva, 1974).

re-iteration of the constructional visual aesthetics of earlier materials in the medium of stone, I would like to suggest, served an overall symbolic and ideological function in the shaping of such metaphorical visual language.

William S. Smith pointed out one of the most impressive innovations in Djoser's funerary complex as the use of plant forms (Smith 59). The papyrus columns and the reed-bundle (channelled) column shafts appear in various structures of the complex. Their use became very popular later from the early Fifth Dynasty on and executed in gigantic scale in the temple complexes of the New Kingdom. Such plant columns help to identify the significance of the North and the South Buildings in their courts to the east of the Step Pyramid. The façade of the House of the North comprise engaged circular shaft columns with papyrus capitals and can be associated with the traditional *Per Nu* shrine of the Lower Egypt (fig 11). The House of the South on the other hand, had a very similar façade with many of the Hed-Seb court shrines which had curved architraves (fig 12). The capitals of its attached columns were in the form of "a flowering sledge", the plant symbolic of Upper Egypt. Therefore the shrine can be associated with the wattle & daub *Per Wer* shrine of Lower Egypt<sup>28</sup>. The column capitals themselves if not the form of the whole structure had a sign value, that functioned by visual connotation and through the collective memory of the Egyptians.

The colonaded entrance hall, as mentioned earlier, also contains such fasciculated "reed-bundle" columns, engaged to extensions from the walls<sup>29</sup>(fig. 13). These tall and slender columns with pendant leaf-like capitals carry a heavy stone slab roof, which was carved underneath to represent wooden logs. Among these protrusions of engaged columns on the either side of the hallway, large niche like spaces were formed where traces of royal statuary were found<sup>30</sup>. At the western end, the hallway opens up to the Great *wsht* - broad court by a narrow gate, a double door carved half open in stone, the wooden details of which were carefully rendered, including a wood imitated architrave. Similar

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<sup>28</sup>Smith, 54-5. For the *Per Wer* and *Per Nu* shrines see Lehner, 75-6; Arnold, 1997, 82-84

<sup>29</sup>Lauer, 1951, 12; Smith 60; Aldred, 59.

<sup>30</sup>On one statue base which was found in this area, "the king's feet treading upon nine bows, symbols of the contiguous nations" was depicted, along with "the crouched figures of adoring *rekhyt*--plovers representing the populace of Egypt." It was also on this piece that Imhotep's name and titles were read. Aldred 48.

remarkable reproduction of wooden details were also found in the shrines of the Heb-Sed court, in their false half open doors, wood rafter ceilings and wooden palisades between the shrines.

Most impressive however is the decoration of the subterranean burial chambers of the Step Pyramid and the South tomb, in which the limestone reliefs of Djoser were found installed in the false doorways (fig. 14). Greenish-blue faience tiles of plano-convex shape that simulate reed-mat structures in relief, frame the reliefs and cover the entire walls (Stelman 1996, 342-3; Lehner, 88). The doorways were topped by arches that were supported by *djed* columns in relief. *Djed*, originally meant 'Stability'. It was associated with the cult of Osiris, and symbolized a cosmic pillar that holds the sky<sup>31</sup>. One of the last episodes in the Sed festival was the raising of the *Djed* pillar at dawn, symbolizing the king's triumph over death and the restoration of the cosmic order (Uphill, 380). Although reported to have been hastily finished, the faience tile panels are remarkable in their visual connotations. Scholars attributed associations with archaic shrines and king's own palatial residence. Stadelman refer to the famous "Field of the Reeds" from the Pyramid texts, where it was defined as the afterlife dwelling place the king receives "along with the sky and earth"<sup>32</sup>.

In the maze of the galleries of the Step pyramid (Galleries VI-IX), a remarkable collection of around 40,000 stone vessels, in alabaster or other fine stones, were found, the majority of which were inscribed (Lehner 89). From their inscriptions, it was discerned that most of them were not made for or at the time of Djoser, but belonged to his royal ancestors. The Step Pyramid complex acted as a repertory of Djoser's royal history, enhancing his ancestral ties. Likewise the architectural vocabulary of the monuments of his funerary complex drew upon the repertoire of forms of Early Dynastic Egypt with this idea of historicity. The united past of the lands of Egypt in the architectural language of the funerary complex enhance the unification of the whole country.

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<sup>31</sup>See "Djed" in R.T. Rundle Clark, *Myth and Symbol in Ancient Egypt*, Thames and Hudson: New York, 1978.

<sup>32</sup>Stadelman 1996, 343. green is mentioned to be the color of regeneration and also implies "the watery associations of the Egyptian Netherworld" Lehner

## 5. Concluding remarks

The mimetic mode of building in plant forms in the funerary complex should be seen as tropes of a cognitively constructed natural landscape, not devoid of meaning, but culturally constructed from the predynastic period on. The culture of the ancient Egyptian society was shaped by Egypt's exceptional geography, the agricultural landscape along the Nile and its restricted resources, upon which the ancient economy was built. The calendars of religious festivals were mainly shaped by the agricultural calendar, dividing the year into three four-month seasons: "Inundation, Emergence and Harvest" (Shafer, 25). The yearly scheduling for the construction of the monumental royal complexes must have been in direct correspondence to this agricultural/ritual calendar, since the work force for the construction of pyramids was constituted from the peasant population, as *corvée* labor, especially during the inundation when they could not work their land. The construction of irrigation canals and roads as well as other public works depended on such labor organisation (Andreu 27).

The building of the royal funerary complexes in gigantic scales like that of Djoser, probably went on throughout the king's reign and was itself a major social event, in which a considerable portion of the society participated. Through the construction of these monuments which were at least partly preparation for the major royal festivals, the king was able to set up a dynamic and creative societal realm where social solidarity was enhanced along with the legitimization of his royal status in front of a social consent.

The idea of an extraordinary leap in the architectural traditions with the innovative character of Djoser's funerary complex should therefore be accepted with reservations, considering the conscious and even ideological use of archaic repertoire in its architectural *decor*. The virtual absence of religious buildings of the Predynastic and Early Dynastic periods in the record of archaeology due to their perishable nature should always be kept in mind. The creation of the sense of an ancestral past must have been central to the ideology of kingship in the Third Dynasty.

On the other hand, the aggrandizement in scale and impressive solidification of monumental architecture with stone, intended to last for eternity, is perhaps the most important contribution of Djoser's architects. The

ephemeral and the transient, in all spheres of Egyptian life, were formulated into the ever-lasting and the eternal, along with the absolute crystallization of the religious traditions. The transformation of *ideas* into *knowledge* at this time has survived in the collective memory in the mythical wisdom of the architect Imhotep.

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