

**VI CONGRESSO  
INTERNAZIONALE  
DI  
EGITTOLOGIA**

*Atti*



**SESTO CONGRESSO INTERNAZIONALE  
DI EGITTOLOGIA**

*Atti*

**VOLUME I**

**1993**

*Comitato Organizzativo del Congresso*

Silvio Curto

Sergio Donadoni

Anna Maria Donadoni Roveri

Bruno Alberton

*Coordinamento Editoriale*

Gian Maria Zaccone

Tomaso Ricardi di Netro

*Il volume è stato realizzato con il contributo  
della **Società Italiana per il Gas p.A.** di Torino  
ed è offerto a tutti i congressisti  
del VI Congresso Internazionale di Egittologia.*

## Indice del volume

<i>Premessa</i>	p.	III
BAKR Mohammed	»	V
AUTH Susan H. <i>The Egyptian Collections at The Newark Museum</i>	»	3
BEHLMER Heike <i>Historical evidence from Shenoute's "De extremo iudicio"</i>	»	11
BELLUCCIO Adriana <i>Le mythe du Phénix e la lumière de la consubstantialité royale du père et du fils</i>	»	21
BELOVA Galina <i>Les pays de la Nubie ancienne</i>	»	41
BERG-ONSTWEDDER Gonnje van den <i>The Apocryphon of Bartholomew the Apostle</i>	»	47
CAPASSO Mario <i>A proposito dell'itinerario papirologico di Jean-François Champollion</i>	»	51
CAREDDU Giorgio <i>Un'ipotesi circa la musica egizia</i>	»	61
CARREIRA José Nunes <i>Hermopolitan traditions in Philo Biblius' Phoenician History</i>	»	69
COLLIER Mark <i>Pro verb</i>	»	77
DAVIDE Domenico <i>Notizie storiche della Collezione osteologica egiziana predinastica e dinastica «Giovanni Marro», conservata al Museo di Antropologia ed Etnografia dell'Università di Torino</i>	»	87
DEGARDIN Jean-Claude <i>Le temple de Khonsou. Problèmes de destination et de propriété</i>	»	93
DEMAREE R. J. <i>Recent work on the administrative papyri in the Museo Egizio, Turin</i>	»	101
DOLZANI Claudia <i>I testi medici egiziani tra scomparsa e riscoperta. Possibili vie di un «iter» sotterraneo</i>	»	107

EYRE Christopher John <i>Why was Egyptian Literature?</i>	p. 115
FIORE MAROCCHETTI Elisa <i>Variations of the Mastaba Tomb during the Middle Kingdom</i>	» 121
GIADOROU-ASTORI Lucio <i>La pyramide-symbole: image réfléchie d'un système mathématique-physique retrouvé</i>	» 129
GOLVIN Jean-Claude, LEBLANC Christian, SADEK Abdel Aziz <i>La sauvegarde du Ramesseum</i>	» 133
GRANDET Pierre, MATHIEU Bernard <i>La construction ergative de l'accompli égyptien</i>	» 145
GRILLETTO Renato <i>Analisi per attivazione neutronica e chimica di una serie di denti egiziani antichi e moderni</i>	» 153
HARING Ben J. J. <i>Libyans in the Theban region, 20th dynasty</i>	» 159
HARLE Diane <i>Nestor L'Hôte, «ami et compagnon de Champollion», (1804-42)</i>	» 167
HAWASS Zahi <i>The Great Sphinx at Giza: Date and Function</i>	» 177
HAYNES J. L., LEPROHON R. J. <i>The Royal Ontario Museum Shabtis project. A progress report</i>	» 197
HEEL Koen Donker van <i>Publishing a Choachyte's Archive</i>	» 203
HEINSOHN Gunnar <i>Who were the Hyksos?</i>	» 207
HODJASH Svetlana <i>Katalog Altägyptischer Gefäße aus der Sammlung des Staatlichen Puschkin-Museums des Bildende Künste</i>	» 221
JOHNSON W. Raymond <i>The Deified Amenhotep III as the Living Re-Horakhty: Stylistic and Iconographic Considerations</i>	» 231
JONG Aleid de <i>The functions of the Ba in Ancient Egyptian Anthropology</i>	» 237
KAMMERZELL Frank <i>Aristoteles, Derrida und Ägyptische Phonologie: zu systematischen Verschiedenheiten von geschriebener und gesprochener Sprache</i>	» 243
KORMYSHEVA Eleonora <i>The officials at the court of meroitic kings and their role in king's election</i>	» 253
LEBLANC Christian, FEKRI Magdi <i>La prospection archéologique des vallées latérales de T3 ST NFRW. Bilan et perspectives</i>	» 259
LIU WEN-PENG <i>Review for the Despotism of Pharaonic Egypt</i>	» 269

LLAGOSTERA Esteban <i>Studio scientifico di due teste di mummia egiziana proprietà del prof. Jaoquin Barraquer oftalmologo di Barcellona</i>	p.	273
LOCHER Kurt <i>New arguments for the celestial location of the decanal belt and for the origins of the S3h-hieroglyph</i>	»	279
LOOSE Jana <i>Labourious "Rites de Passage": Birth Crisis in This World and in the Beyond</i>	»	285
LUFT Ulrich <i>Asiatics in Illahun. A preliminary report</i>	»	291
MACKE André, MACKE-RIBET Christiane <i>Paléopathologie osseuse de la population égyptienne d'époque romaine provenant de la Vallée des Reines</i>	»	299
MANNELLI Neri <i>La Collezione di un viaggiatore ottocentesco: Massimiliano Strozzi Sacrati</i>	»	307
MANTELLINI Elio, TOSI Mario <i>La calcolosi biliare in Egitto al tempo dei Faraoni</i>	»	313
MARCHIORI BAKOS Margaret <i>The significance of wine drinking in love in the daily life in ancient Egypt</i>	»	319
MARX Christoph <i>Das Lexicon der Ägyptologie im Information Center »Altertum«</i>	»	325
MOERS Gerald <i>Negationen im Altägyptischen</i>	»	333
MÜLLER Maya <i>Iconography: basic problems of the classification of scenes</i>	»	337
MU-CHOU POO <i>The Liturgy of the Offering of Mirrors: a Structural Analysis</i>	»	347
NIWINSKI Andrzej <i>Excavations in a Late Period Priest's Mummy at the National Museum Warsaw. Preliminary report</i>	»	353
NOBERASCO G., BEUX JAEGER M. <i>L'Egitto nelle Sacre Scritture</i>	»	363
OSING Jürgen <i>Zwei hieratische Papyri aus Tebtunis</i>	»	373
PADRÒ Josep <i>Note sur la tombe de Séhou à Héracléopolis Magna</i>	»	377
PIRELLI Rosanna <i>Egyptian myth and trade</i>	»	383
COZZOLINO Caterina <i>The land of PWNT</i>	»	391
FATTOVICH Rodolfo <i>Punt: the archaeological perspective</i>	»	399
POOLE Federico <i>Scarabs from the Necropolis of Pontecagnano</i>	»	407



RAND NIELSEN Elin <i>Honey in medicine</i>	p. 415
RASSART-DEBERGH Marguerite <i>A l'origine de la connaissance du Monachisme Copte</i>	» 421
REINTGES Christoph <i>A Functional Reexamination of Hammamat-inscription 191.6</i>	» 437
ROSATI Gloria <i>Una versione del «Papiro Geografico» di Tanis da Tebtynis</i>	» 447
SCHNEIDER Thomas <i>Asiatic Personal Names from the New Kingdom. An Outline with Supplements</i>	» 453
SCHOLZ Piotr O. <i>Die Kontinuität des Altägyptischen in der Ikonizität und Theologie des Orientalischen Christentums</i>	» 471
SHERKOVA Tatjana A. <i>Egyptian Gods in Kushan Kingdom?</i>	» 479
SIST Loredana <i>The Reliefs of Tomb n. 27 at the Asasif</i>	» 485
SMITH Mark <i>New Middle Egyptian Texts in the Demotic Script</i>	» 491
SMITH Stuart Tyson <i>The House of Merykay at Askut and the Beginning of the New Kingdom in Nubia</i>	» 497
SOUVALTZI Liana <i>Discovering a Macedonian Tomb in Siwa Oasis</i>	» 511
STADNIKOW Sergei <i>Die verallgemeinerenden Ausdrücke der Könige des Alten Reichs auf den Sinai-Inschriften</i>	» 515
SWEENEY Deborah <i>Women's correspondance from Deir El-Medineh</i>	» 523
TORINO Marielva <i>A case of tooth replantation in Ancient Egypt</i>	» 531
TRAPANI Marcella <i>The Royal Decree and the Divine Oracle from the Old to the late New Kingdom: a Compared Research</i>	» 537
VACHALA Bretislav <i>Die Biographie des Ptahschepses</i>	» 547
VALBELLE Dominique <i>La notion d'identité dans l'Égypte pharaonique</i>	» 551
VERCOUTTER Jean <i>La fin de l'ancien empire: un nouvel examen</i>	» 557
VERHOEVEN Ursula <i>Ein saitisches Totenbuch</i>	» 563
VYCICHL Werner <i>Le quattro forme della coniugazione sdm-f</i>	» 565

WALKER Anna Kay <i>Ancient Egypt: An Educator's Guide</i>	p.	567
WIMMER Stefan <i>Ein Ächtungstext aus Israel/Palästina</i>	»	571
ZEIDLER Jürgen <i>A New Approach to the Late Egyptian "Syllabic Orthography"</i>	»	579
ZIGNANI Pierre <i>L'armée romaine de Haute-Egypte sous Dioclétien, à propos de «Praesentia»</i>	»	591
<i>Tavole</i>	»	597
<i>Indici</i>	»	599



## The Sphinx temple

An account of certain measurement relations which may support a supposition of a closer connection to the Cheops complex.

In 1985 Professor Rainer Stadelmann suggested that the so-called Sphinx temple was not, as is usually supposed, built by Cheops' successors, but that there were good grounds to suppose that it had been Cheop's Sun Cult temple.

Rainer Stadelmann's supposition means that the date of the temple's construction must be moved back to the reign of Cheops and that the building must be regarded as part of the entire Cheops complex. My investigations into this interesting question do confirm Rainer Stadelmann's theory and I can back his suppositions purely by the way that the groundplan of the temple has been laid out.

The questions is:

"Are there in the ground plan and the proportions of the Sphinx temple any signs of a connection with the rest of the Cheops complex?"

The answer is: "Yes", and I shall now attempt to justify this standpoint.

In several instances, the drawings of groundplans of mastabas temples, and temple complexes constructed during the Old Kingdom indicate that their interior layouts were divided into a 4:3 ratio. It is difficult to decide just why this particular ratio was found to be desirable and also to pinpoint when the concept arose. But it was certainly in evidence as early as the First Dynasty.

The picture (fig. 1) shows a tomb complex. The grave pit, which is covered by a tumulus, has been sited so that it divides the monument into a proportion of 4:3. Another fine example of the use of the 4:3 ratio occurs in the monument designed by the architect Imhotep for King Zoser of the Third Dynasty (fig. 2). This enormous funerary complex is surrounded by a fine limestone wall and dominated by a Step Pyramid of six stages. However, architectural researches have demonstrated that this structure has been changed no fewer than 5 times. It consisted originally of a square mastaba. This mastaba, now buried beneath the Step Pyramid, is, most remarkably, sited exactly at the intersection of the North-South and East-West lines which divide the complex into the aforementioned 4:3 ratio. This 4:3 ratio was also used after Cheops time. It was employed in the monuments of both Chephren and Mykerinos. Egypt is rich in buildings having 4:3 as the basic proportions. It is certain that this proportion has been one of primary principles of both builders and architects for thousands of years. This proportion has also been used outside Egypt and, up to our era, it has been strictly observed

in the design and construction of a great number of ecclesiastical buildings in Europe (fig. 3a and 3b). But let us look at the Cheops complex. Firstly at the remains of the former funerary temple on the eastern side of the pyramid (fig. 4). Unfortunately, time has dealt very harshly with this temple, but most of the sockets chiselled into the rocky ground for the columns can still be located. This check shows that the 4:3 ratio was not used. Instead, a ratio of 7:9 (4-3-9) was used when the ground plan was marked out. The same 7:9 (4-3-9) ratio can clearly be seen to have been used when the ground plan of the Sphinx temple was marked out (fig. 5a and 5b).

Before showing where the 7:9 (4-3-9) proportion occurs elsewhere in the Cheops pyramid complex, and how it determines the angles, height and breadth, etc. of the pyramid, it is probably a good idea to describe the method of measurement employed (fig. 6).

At first sight it seems easier to divide a given length into a 4:3 ratio than into a 7:9 ratio. However, this is not so. Any given measuring rope can be marked off into a 7:9 ratio in a matter of seconds whereas it is almost impossible to divide the same rope into a 4:3 ratio without the use of artificial aids. A given square can, just like a given length be divided into a ratio of 7:9. There are, of course, many ways of doing this but, bearing the present subject in mind, we shall confine ourselves to the method illustrated in the picture (fig. 7). We may regard this diagram as extremely interesting because it represents the builder's primary principle. With simple geometrical additions in this diagram yields, remarkably easily, exact data on many hitherto highly controversial proportional relationships in the Pyramid complex. I shall demonstrate later how this diagram, when it is laid over the ground plan of the Sphinx temple, clearly demonstrates the temple's relationship to the Cheops complex. But before that, we shall try laying this diagram over the funerary temple on the eastern side of the Pyramid (fig. 8). We can then see how the diagram has determined the siting of the columns and the altar.

Let us now look at the Coffin in the King's Chamber (fig. 9) which has been the object of much dispute for many years, not least because its length and breadth seem to bear no relation to the ancient Egyptian unit of measurement — the cubit. The diagram comes to our aid here by proving that the base area of the Coffin is a product of the 7:9 ratio, based on the outermost edges of the floor of the Chamber. In other words, the dimensions of the floor determined the length and breadth of the Coffin. This can be illustrated as follows. The floor of the Chamber is a rectangle. It should be regarded as two equal 280 fingerbreadth squares. If this diagram is laid over the Western part of the Chamber, the area with the value of 3 will exactly match the breadth of the Coffin. The next question is obviously the length of the Coffin and why it is that precise length. Again the architect's basic 7:9 ratio comes to our aid. The rectangle in this picture is divided up again as shown, although the final proportions are actually  $4\frac{1}{2} : 3\frac{1}{2}$  when seen in relation to the entire diagram. This picture gives us the exact data on the length and the breadth of the Coffin and on its presumably correct siting in the Chamber.

If the rectangle which determined the Coffin were significantly increased — to  $28 \times 28$  cubits, or 409,530 metres,  $14 \times 28$  cubits or 204,765 metres, then the

basis for a vertical sectional drawing through the Pyramid would be formed (fig. 10). The Pyramid reaches a total height of 147,175 metres. Deducting the thickness of the socle — 0,522 metres — leaves a height of 146,653 metres and, taking half the base measurement or 115,180 metres, we arrive at a pyramid angle of  $51^{\circ} 51' 14''$ . If diagonals are drawn in on the lower right-hand quarter of the constructional plan, as shown, then the Pyramid's system of passages becomes apparent.

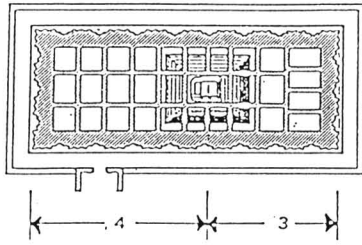
If we lay the diagram over the central part of the groundplan of the Sphinx temple (fig. 11), we notice that the two altars on the diagram are placed in the point between the fields with values of 3 and 4. The altar is similarly sited in the funerary temple. It is especially worth noting that this is also the starting point of the line that determines the position and course of the pyramid's entrance passage (fig. 10).

That the diagram can similarly be laid over the ground plan of the Sphinx temple stresses that this method of measurement has been used — and that closer scientific investigation is therefore worthwhile. As already mentioned. The diagram, with a few geometric additions, will yield a mass of data which, besides answering many unsolved questions, can also verify many of our conjectures.

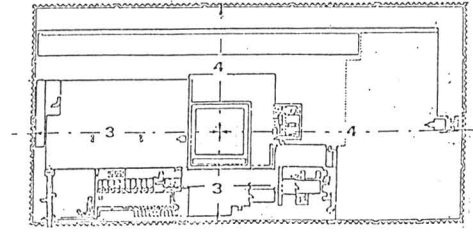
The Sphinx temple's architecture also embodies a number of columns: 14 massive and 28 thinner. The numbers 14 and 28 are, as we already know, important dimensions in the Cheop's complex and so the number of these columns after the extension of the temple is also significant when judging the relationship of this temple.

### *Conclusion*

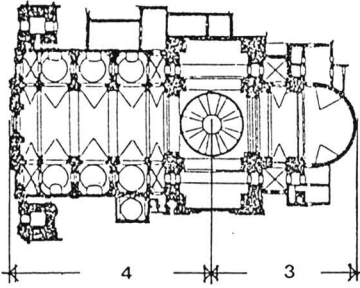
The conclusion must be that, at the 7:9 method of measurement has not been observed in other buildings of the Old Kingdom but, in this period, has only been used in the Cheop's complex's architecture both externally and internally, we can deduct that, as the design of the Sphinx temple clearly bears the signs of the same method of measurement, this temple must therefore be ascribed to the architect of the Cheop's complex.



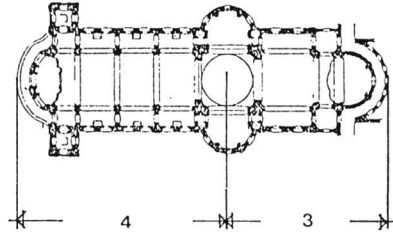
1. (EMERY)



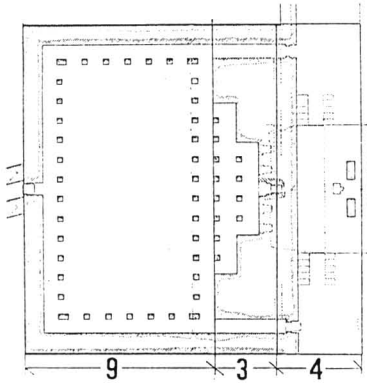
2. (LAUER)



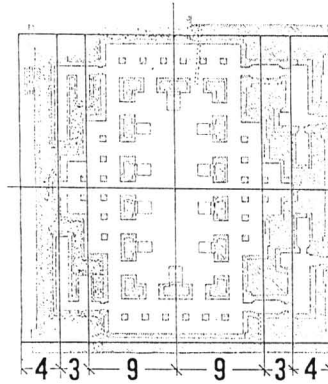
3a. Theatinerkirche, Münich.



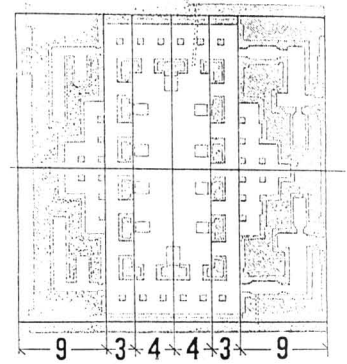
3b. Weingarten, Münich.



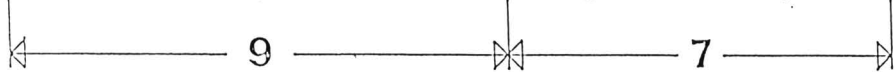
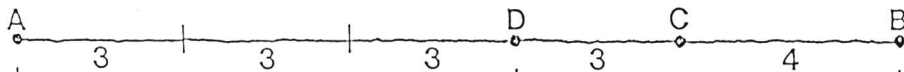
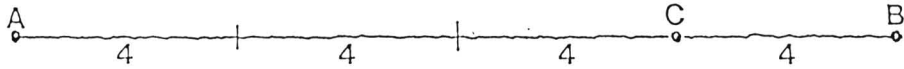
4



5a

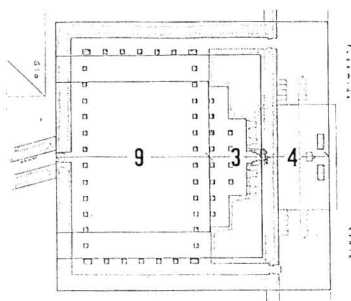
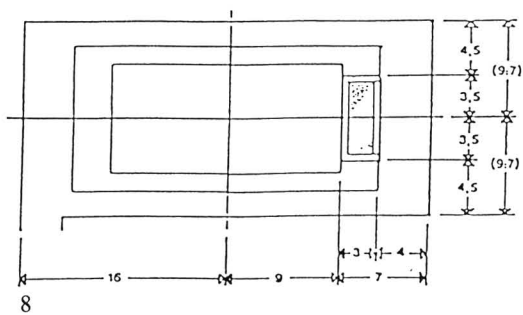
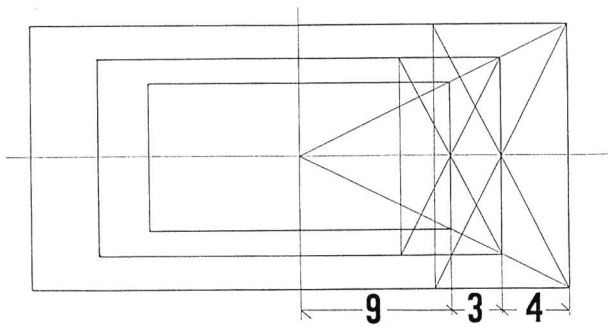


5b



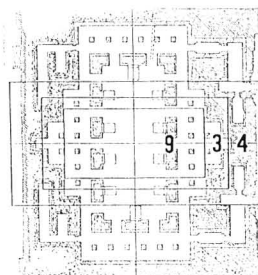
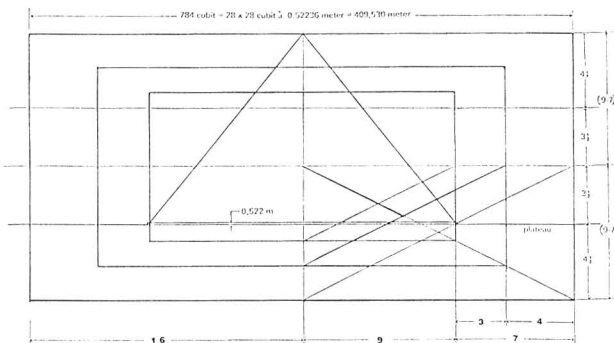
6

7



9

10



11