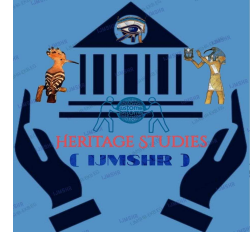


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"Iwan" An analytical Study of Rooting and Associated Architectural Elements in Ancient Civilizations

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"إيوان" دراسة تحليلية في التأصيل وماهية العناصر المعمارية المرتبطة به في الحضارات القديمة
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ABSTRACT

The study aims to research, investigate and uncover the roots of the term through analytical and rooting study to show the architectural elements associated with that in ancient civilizations. The term 'Iwan', the plural form are 'Iwans', the roots of this term go back to ancient civilizations such as; ancient Egyptian civilization, architecture of the Ptolemaic era, Parthian architecture of Persia, Sasanian architecture, then Coptic architecture and Islamic mosques and schools. Iwan had an important architectural element in the design of mosques and Islamic schools. It is a vaulted hall with a front open to a foyer or a courtyard by an arch and the back is closed, and as a square or rectangular architectural unit with a flat or vaulted ceiling. The dictionaries confirm that the 'Iwan' is of Persian origin. The term 'Iwan' appeared in Persia during the reign of Emperor Darius I (522-486 BC). It continued as a distinctive architectural element in Persia for the Parthian architecture (247 BC - 224 AD) and for the Sasanian architecture (224 AD - 651 AD). It was called (â-pâd-ânâ), Iwan-Ivan. But it is possible that the 'Iwan' had roots that are older linguistically and architecturally, where the term 'Iwnn' was used in the ancient Egyptian civilization from the eighteenth dynasty (15th Century B.C.) until the Ptolemaic period to denote the shrine of the temple. It was designed closed on three sides and open to the courtyard or hall of the temple and its roof is either flat or vaulted. As well as the term 'Iwnyt', this means colonnaded hall (from the column - Iwn). Perhaps 'Iwnn', as a term and an architectural element was transmitted from Egypt to Persia by Egyptian artists and craftsmen, those who were transferred to the Persian capital during the rule of Emperor Darius I to construct his architectural buildings.

مُلخَص

تهدف الدراسة الى البحث والتقصي في جذور وعملية تأصيل مصطلح "إيوان" من خلال دراسة تحليلية لتبيان العناصر المعمارية المرتبطة بذلك في الحضارات القديمة. تعود جذور هذا المصطلح إلى الحضارات القديمة مثل؛ الحضارة المصرية القديمة، عمارة العصر البطلمي، العمارة البارثية في بلاد فارس، العمارة الساسانية، ثم العمارة القبطية والمساجد والمدارس الإسلامية. يُعد "الإيوان" وجمعه "إيوانات" عنصراً معمارياً مهماً، وهو قاعة مقببة ذات مقدمة مفتوحة على بهو أو فناء بواسطة عقد ومغلقة المؤخرة، وكوحدة معمارية مربعة أو مستطيلة ذات سقف مقبب أو مسطح. يُعتقد أن "الإيوان" ظهر في فارس في عهد الامبراطور دارا الأول (522 - 486 ق.م)، واستمر كعنصر معماري مميز للعمارة الفارسية (247 ق.م - 224 م) وللعمارة الساسانية لبلاد فارس (224 م- 651 م) وسمى أبادانا/إيوان-إيفان. ويُعتقد أن "الإيوان" كان له جذوراً أقدم لغوياً ومعمارياً؛ حيث ورد 'Iwnn - إيوان' في الحضارة المصرية القديمة منذ عصر الأسرة الثامنة عشرة (15 ق.م) حتى العصر البطلمي للدلالة على مقصورة المعبد، والتي صُممت مغلقة من ثلاث جهات ومفتوحة على فناء أو صالة المعبد وسقفها إما مسطح أو مقبب، وكذلك المصطلح 'Iwnyt - إيونيت"، والذي يعني قاعة مُعمدة (من العمود Iwn - إيوان). وربما انتقل 'Iwnn - إيوان' كمصطلح وعنصر معماري من مصر لبلاد فارس بواسطة الفنانين والحرفيين المصريين الذين تم نقلهم لعاصمة الفرس إبان حكم الامبراطور دارا الأول لتشييد منشآته المعمارية.

KEYWORDS

Iwan, â-pâd-ânâ, ayyān, Iwnn, Iwnyt.

كلمات دلالية (مفتاحية)

إيوان، الأبادانا، إيوان، إيونيت، إيونيت.

INTRODUCTION

All types of architectural systems and the terminology denoting them in any ancient civilization, whether civil, military, religious or even commercial architecture, were the product of its civilization and the result of its environment, affected by the weather, the availability of building materials, the prevailing ideas, and the political, economic and social conditions. Despite this, cultural exchange between nations is an undeniable historical fact. Each civilization borrowed from its predecessors or even its contemporaries what it lacked or needed in terms of architectural elements and artistic features, and then kept them as they were or gave them a local character. Religious architecture throughout the ages had a characteristic as it was a reflection of certain religious ideas and concepts and to serve specific rituals. This did not prevent one civilization from benefiting from another by transferring some of its architectural elements and employing them, despite the religious difference. This is what happened with the term and the architectural element Iwan, and the study will discuss it.

Important Of Research

In the seventh century AD (first century AH), the Islamic state emerged and annexed the Arabian Peninsula, followed by the annexation of lands from the Sasanian and Byzantine states. Islamic countries (the Rashidun, Umayyad, and Abbasid) have benefited from the inherited and rooted cultural and civilizational values of those countries, in accordance with the Islamic religion and not in conflict with it. The artistic and architectural traditions were the most important, as the Islamic civilization gave it a distinctive Islamic character. The iwan was one of the architectural traditions that the Islamic civilization transmitted directly from the Sassanids (Sasanian Empire / 224 AD - 651 AD) and used it in many buildings, especially religious ones. The Iwan became an important and essential architectural element in Islamic architecture, throughout the ages of Islamic civilization and in all Islamic countries. Linguistically, ancient Arabic dictionaries agree that the iwan is of Persian origin. This is logical, as the Arabs and Muslims took the term and the architectural element iwan since the seventh century AD directly from the Sassanid Persians without touching on its roots that are more distant, especially from the ancient Egyptian civilization. This research will discuss the origin of the Iwan, which is rooted in the Egyptian civilization linguistically and architecturally, how and when it was transferred from Egypt to Persia.

The Research Methodology

The research approach relied on the study of the Iwan in the three civilized axes (Islamic - Persian - ancient Egyptian), which were related to the Iwan, from the most recent historical to the oldest to reach the desired result ⁽¹⁾.

Firstly: The Iwan in Islamic architecture: its various uses in the designs of religious and civil buildings.

Secondly: The iwan in Persian architecture: the origin of the terms that refer to it, the beginning of its appearance, its uses in buildings across Persian civilizations (Achaemenid - Parthian - Sasanian), designs and concepts.

Third: The Iwan in the ancient Egyptian civilization: a study of the term and what it denotes, its beginning, its development through the ages, its concept, its architectural design, and its relationship to its counterpart from the civilizations that followed it...

Fourth: How and when did the term and the architectural element iwan move from the Egyptian civilization to the Persian civilization.

Firstly: The Iwan in Islamic architecture

The iwan in general in Islamic architecture had a traditional design (a hall with three walls, an open facade, and a vaulted ceiling) with the addition of some elements ⁽²⁾. In the Islamic era, the iwan became an essential element in the design of the mosque, mausoleum, caravanserai, garden pavilion, and palace ⁽³⁾.

The iwan was also used in the planning of Islamic school (madrasa). The most famous of these is the presence of a central courtyard surrounded by four iwans on the four sides, the largest of which is the qibla iwan (Fig.1). They are used for teaching and prayer when needed⁽⁴⁾.



Fig.1: The iwan in the Madrasa a Mosque of Sultan Hassan in Cairo (By Author).

¹The author is a specialist in Egyptology, so he relied, in studying the Iwan in the Islamic and Persian civilizations, on what was published by specialists in Islamic civilization and its architecture, as well as on specialists in Persian civilization and its architecture.

² Talee, Sinan, Mohammad, and, Shareef, Anwar Meshal, *The Design Characteristics of the Architectural Elements in the Houses of the Old Mosul City-An Analytical Study of the Iwan Element*, Al-Rafidain Engineering Journal, Vol.26, No.2, October 2021, pp.32-53.

³ Anisi, A., *Early Islamic architecture in Iran (637-1059)*, The University of Edinburgh, 2007, pp.64-68.

⁴ Al-wakil, Abdul-wahed, *The principles of Traditional design of Mosques ,symposium on Mosque architecture*, college of architecture & planning King Saud University, Vol.10B, 1999, pp.1-2.

There is almost agreement between the dictionaries of ancient and modern Arabic that the linguistic origin of the iwan is Persian. This is logical in light of the transfer of the iwan as an architectural element and term from the Sassanids to the Muslims.

Secondly: The iwan in Persian architecture

Iwan in Persian is called "ayvān" (palace, veranda, balcony, portico), which often refers to the function of the palace, either the entire palace or the most important and official part of the palace, and it can mean the most official or impressive part of any building ⁽¹⁾. It has been suggested that AYVĀN derives from "apadāna" ⁽²⁾ (palace) ⁽³⁾.

Ā-pād-ânâ is an Old Persian term that persisted and spread outside of Persia, and refers to audience halls especially those at Persepolis (the pillared hall, palace, or audience hall built of stone with columns). As well as those created by Emperor Darius I (522-486 BC). The overall purpose of the massive construction of the Apadana was probably to accommodate thousands of people and to demonstrate the prestige, wealth and power of the Achaemenid Empire ⁽⁴⁾.

The apadana (Fig.2) was begun under Darius and finished under Xerxes. The term apadana does not occur in the persepolitan inscriptions, but is used an identical building at Susa, the apadana has a square interior hall with 6 rows of 6 columns, enclosed by walls of sun-dried bricks, 15 feet thick, about 250 feet in length and over 60 feet high to the ceiling ⁽⁵⁾. But this derivation is no longer consistent, and the second meaning of ayvān (vaulted hall, walled on three sides and opened directly to the outside on the fourth) has been developed by Western art historians and archaeologists. Especially since the oldest known examples have been found from the Parthian era ⁽⁶⁾.

¹ Grabar, O., "AYVĀN", Encyclopedia Iranica, Vol. III, 2011 [1987], pp. 153-155.

² Henning, W., B., Bráhman, transactions of the philological society, London, 1944, p.110.n.1.

³ Eilers, W., Iran and Mesopotamia, in, the Cambridge history of Iran volume III, the Seleucid, Parthian and Sasanian periods edited by Yarshatere, E., Cambridge, 2000, p.495.

⁴ Schmitt, R. and Stronach, D., "Apadana," Encyclopædia Iranica, Vol. II/2, 1987, pp. 145–148 .

⁵This immense room could hold up to 10000 people. On three sides it had open porticoes of two rows of 6 columns, of the same height. at the corners of such a plan tower-like rooms that contained staircases and accommodation for guards are produced. The whole building stood on a platform of its own, hewn out of the living rock, and with flights of steps leading to it on the north and east sides. both stairs are sculptured with the same picture of one great tribute procession a picture in three registers and measuring about 270 feet represented once as seen from the right, once as seen from the left; except for the small deviations caused by these opposite points of vision, the two are identical.

Review: Herzfeld, E.,Iran in the ancient East , London, 1941, pp.227-228.

⁶ Grabar, O., "AYVĀN", pp.153-155.

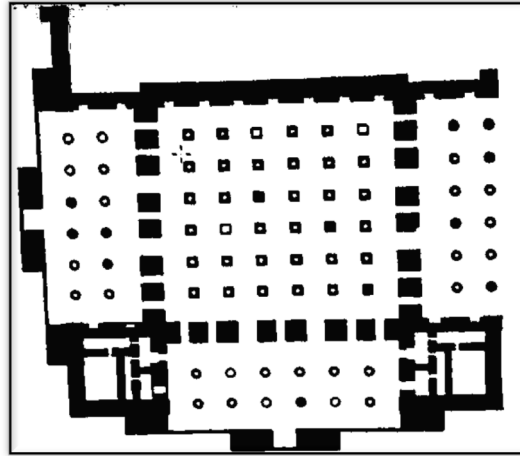


Fig.2: The design of Apadana. (After: Herzfeld, E., *Iran in the ancient East*, London, 1941, Fig.330).

The iwan became one of the defining features of the architecture of the Parthian (247 BC - 224 AD) and Sasanian (224-651 AD). Parthian architecture was responsible for a large number of Sasanian architectural characteristics. They all feature vaulted cylindrical iwans introduced in the Parthian era. But in the Sasanian period they reached a great degree of development, as in the case of Ctesiphon.⁽¹⁾ Ayvān (or tāq)-e Kesrā (the Palace of Kōsrow), (Fig,3) the most famous of all Sasanian monuments is the legendary throne hall of the Sasanian kings of kings. The Ayvān-e Kesrā (also called Ayvān-e Madā'en) is usually associated with the name of Ctesiphon⁽²⁾. Due to the ambiguity of the origin of the iwan, there are hypotheses about its origins. The first is that it originated in Persia until it became the standard feature of late Iranian architecture.



Fig.3: Ayvān (tāq)-e kesrā, Ctesiphon, Iraq. (After: Wikipedia, on 4/4/2023 AD)

The second is Mesopotamia (Babylon or Assyria), as an imitation of reed tents or primitive huts. The third is that the iwan is inspired by the ancient niches that

¹Taghizadeh, K., An Investigation of Historical Structures in Iranian Ancient Architecture, Architecture Research, August 2012, p.6.

²Keall, E. J., *ayvān-e Kesrā*, In: Yarshater, Ehsan (Ed.). Encyclopædia Iranica, Vol. III/2: 2012, p.155.

were carved for worship in the natural rocks of eastern Anatolia⁽¹⁾. According to Grabar that the ayvān is a local development of Mesopotamia is no longer accepted. Or that the ayvān arose from the influence of Mediterranean architectural forms on the Near East. When the Parthian period saw the incorporation of Hellenistic motifs into the traditions of Iran or Mesopotamia. There is not enough information from Iran itself to confirm this. Not being able to equate the Persian and Arabic word ayvān in the form art historians call ayvan, the formal meanings and associations of the former cannot automatically transfer to the latter. However, it is likely that the ayvān in its artistic and historical sense had specific practical and sometimes symbolic functions⁽²⁾. This is because the iwan has linguistic and architectural roots that are older in time and farther spatially, which is the ancient Egyptian civilization

Third: The Iwan in the ancient Egyptian civilization

From the foregoing, it is evident that the iwan was a three-walled building, open from the façade, which is largely the plan of the chapel⁽³⁾ inside the ancient Egyptian temple⁽⁴⁾ (Fig.4). Sometimes that chapel had a wooden door that closed it, and its roof was flat or vaulted.

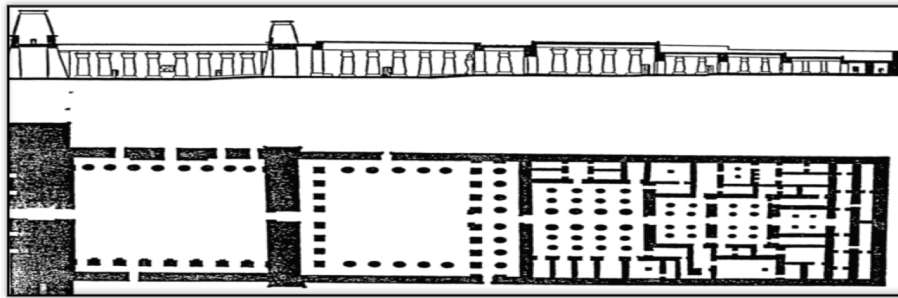


Fig.4: Temple of King Ramses III, Medinet Hapu. (After: Helck, W., Temelarchitektur, Lexikonder Ägyptologie, VI, Wiesbaden, 1986, Cols.361-362.

¹Peker, A. U., The Monumental Iwan: A symbolic space or a functional Device?, METU JFA 1991, pp.5-7.

²Grabar, O., "AYVĀN", pp. 153-155.

³There are three terms in English to express the Holy of Holies of the ancient Egyptian temple, according to its size, and they are from smallest to largest (chapel, shrine, sanctuary).

⁴The temple in ancient Egypt had a semi-traditional design. The Egyptian temple was built mostly on one axis, and the walls were made of limestone and the columns were made of sandstone; whether the temple was dedicated to gods (divine temple) or to Kings (mortuary temple). The temple began with a huge building (pylon), in the middle of which was a gate leading to an open courtyard, which also led to another open courtyard, at the end of which there was a covered hall with columns (hypostyle hall), sometimes followed by another hypostyle hall. At its end were the chapels of the gods (the holy of holies) and the dwelling place of the god and his seat in the temple; where the statue of the god or the King and sacred symbols were placed. For more see: Arnold, A., The Encyclopedia of Ancient Egyptian Architecture, London, 2003.

It is noteworthy that the traditional design of the shrine has been known since the rule of the First Dynasty. Recorded by King Aha circa (3150 BC) on a wooden label from Abydos⁽¹⁾ (Fig.5).

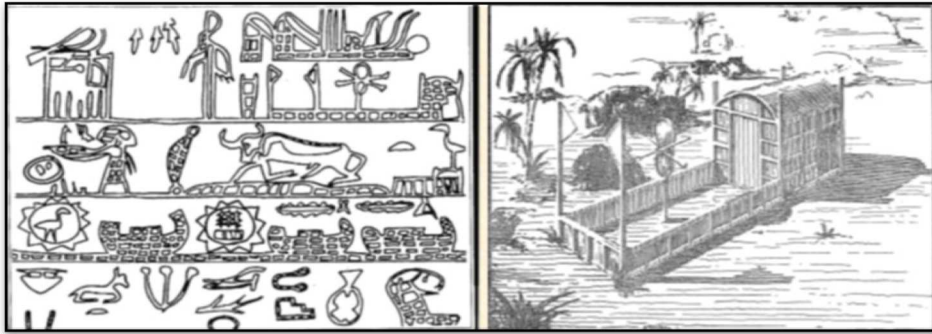


Fig.5: Primitive chapel design on King Aha's wooden label. (After: Petrie, W. M.F., The Royal tombs of the earliest Dynasties, Vol. II, London, 1901, Pl.X.2.

The ceiling of the shrines has often been vaulted and stars painted on it from the inside. The roof is like the sky (horizon) as the shrine is considered the seat of the god and the representation of the universe. Temple shrines in ancient Egypt were given many names⁽²⁾ including the term 'iwnn' appeared with the beginning of the rule of the Kings of the Eighteenth Dynasty (the fifteenth Century BC) and continued until the Ptolemaic period.

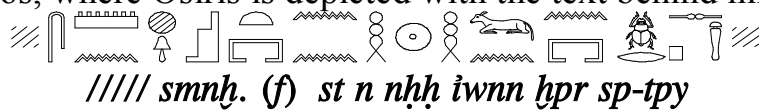
1- The term and architectural element " iwnn " in Egyptian texts

The first appearance of the term was on a limestone stele in front of the eighth pylon in Karnak (CG 34001 - JE 38246) from the reign of King Ahmose I (1552 - 1526 BC)⁽³⁾, where it is written in the following form



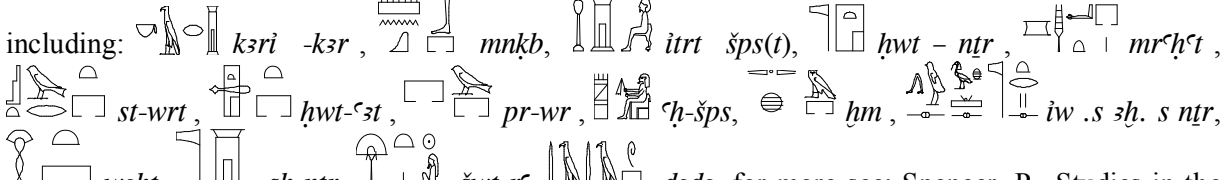
(One who causes the god to know his shrine)⁽⁴⁾.

'Iwnn came again on a stone block of King Ahmose I from the temple of the god Osiris in Abydos, where Osiris is depicted with the text behind him.



¹Petrie, W.M.F., The Royal tombs of the earliest Dynasties, Vol. II, London, 1901, Pl.X.2.

²There were many terms in the ancient Egyptian language that expressed the chapels of the temple,

including:  *k3ri -k3r*, *mnkb*, *itrt šps(t)*, *hwt - ntr*, *mrh't*, *st-wrt*, *hwt-3t*, *pr-wr*, *h-šps*, *hm*, *iw .s 3h. s ntr*, *w3ht*, *sh-ntr*, *šwt-r*, *d3d3*, for more see: Spencer, P., Studies in the lexicography of ancient Egyptian buildings and their parts, The Egyptian Temple a lexicographical study, London, 1984.

³ Spencer, P., The Egyptian Temple, p.100.

⁴ Klug, A., *Königliche stelen in der zeit von Ahmose bis Amenophis III*, Mon Aeg, VIII, Brepols, 2002, p.27.

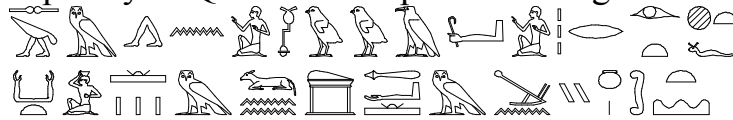
(...He founded the seat of eternity the shrine which came into being on the first occasion////)(¹).

Iwnn was also used in the words of the god, Amun-Ra, which he addressed to Queen Hatshepsut in Deir el-Bahari temple




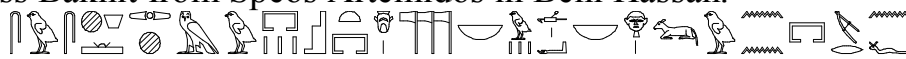
iw mnw. t nfr mit hwt – ntr. I dsr kd m m3wt st 3h imit n nhh iwnn. i hpr sp tpy
(Your monuments are beautiful like my temple, a holy place constructed anew, and a glorious place which endures forever, my shrine which came into being on the first occasion) (²).

The term *Iwnn* was also mentioned on the stela of Djehoty (Northampton stela) , who was a contemporary of Queen Hatshepsut and King Thutmose III



sšm. n. I hmww r irt hft k3wt m iwnn 3 m hbny sty
(I led the craftsmen to undertake works on the great shrine of Nubian ebony) (³).

Noteworthy here is the use of the determinative allotment  for the shrine. It is all that remains of the word indicating the shrine. The term here is masculine, so it is perhaps one of the other terms denoting the shrine (⁴). And the fact that it was made of ebony wood indicates that it was of the type in which the statue of the god was preserved. The term *Iwnn* has also been used in the context of the texts as a term meaning sacred place and a hypothetical synonym for temples and chapels (⁵). As stated in a text by King Thutmose III in the shrine of the goddess Bakhit from Speos Artemidos in Beni Hassan.



swsh hmw st ib ntrw nbw w' nb hr iwnn mr. n. f
(The shrines (*hmw*) were enlarged, the favourites of all the gods, each one in the shrine (*iwnn*) which he has desired) (⁶).

It is noted here that, the term *iwnn* is used, means shrine, as a synonym for the term *hmw*, which means shrines as well. The term *iwnn* was mentioned in another text of King Thutmose III on the eighth pylon in Karnak, and the words were said by God.



¹ Ayrton, E.; Currelly, M., & Weigall, A., Abydos, Vol.III, London , 1904 , PL.XXI .1 .

² Sethe, K., Urkunden der 18. Dynastie, Vol. II, Leipzig, 1906, pp.298-9 .

³ Sethe, K., Urkunden der 18. Dynastie, p.423 .

⁴ Spencer, P., The Egyptian Temple, p. 100 .

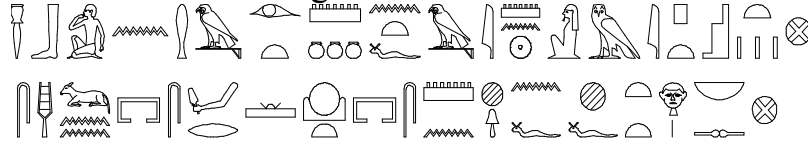
⁵ Spencer, P., The Egyptian Temple, p. 101 .

⁶ Sethe, K., Urkunden der 18. Dynastie, pp.383-4.

sḥꜥ. n. k iwnn. i m kzt nhḥ

(You have erected my shrine as a work of eternity) ⁽¹⁾.

The term *iwnn* came in another text of King Thutmose III, who talked about the establishment of the shrine of the god Amun Ra in Karnak

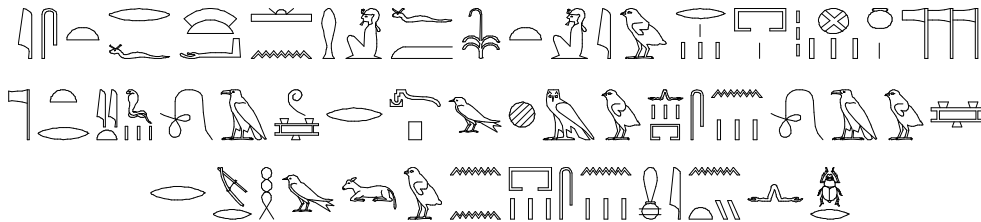


sb n hm. I irt mnw n it. I Imn - r m Ipt - swt

sḥꜥ iwnn sdsr zht smnh. n. fhft - hr nb. s

(My majesty wished to make a monument for my Amun-Re, in Karnak, erecting a shrine, sanctifying the horizon, establishing for him kheft-her-neb-es) ⁽²⁾.

Iwnn was mentioned in the text of King Tutankhamun's stele



ist rf ḥꜥ n hm .f m nsw iw r-prw nw ntrw

ntrwt wzi r stp ḥmw .sn wzi

r mrḥ iwnnw .sn mi nty n hpr

(And now, when His majesty shone as King, the temples of the Gods and Goddesses were crumbling, their sanctuaries (ḥmw) almost destroyed, and their shrines (iwnnw) as if they had not been) ⁽³⁾.

Iwnn was mentioned in the text of King Ay from Panopolis (Akhmim).



Wn in hm . f hr ḥḥ zh r itw .f ntrw nbw r mnḥ

iwnn(w) ntrw r shb ḥwtw . sn

(His Majesty searched for the beneficial in relation to his ancestors, all the gods, so that he could complete the shrines of the gods so that their temples would celebrate) ⁽⁴⁾.

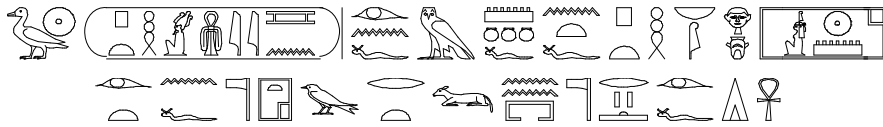
The term *iwnn* continued to be used in the nineteenth dynasty (1295-1188 BC) to express the shrine, as it was mentioned in a text in the corridor of the shrine of the god Ptah in the temple of King Seti I in Abydos. (Fig.6).

¹ Sethe, K., Urkunden der 18. Dynastie, p.618 .

² Sethe, K., Urkunden der 18. Dynastie, Vol. III, Leipzig, 1907, p.834.

³ Helck, W., Urkunden der 18. Dynastie, Heft 22, Berlin, 1958, p.2027.

⁴ Helck, W., Urkunden der 18. Dynastie, p.2107 .



*s3 R^c sty mry n Pth ir n . f m mnw . f n it . f Pth nb m3't hry ib hwt Mn m3't r^c
 'Irt n . f hwt – ntr wrt iwnn ntri ir . f di 'nh*

(Son of Ra, Seti I, MerenPtah, he established his monuments for his father, Ptah, Lord of truth, residing in the temple of Mn-Maat-Ra, The making for him a great temple and a holy shrine, that he may make, given life)⁽¹⁾.

The term *iwnn* was repeated in a text from the reign of King Seti I, also from Speos Artemidos.



*kd (I) hwtw swsh (I) iwnnw
 (I built the temples, I expanded the chapels)⁽²⁾.*

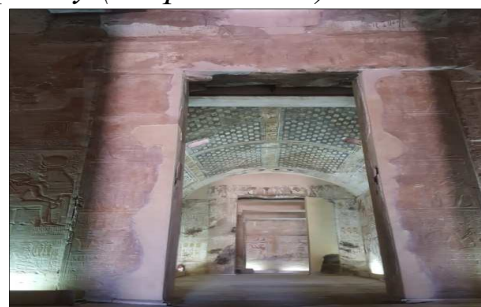


**Fig.6: The shrine of the god Ptah in the temple of King Seti I in Abydos.
 (By Author)**

iwnn was mentioned twice in the texts of the second hypostyle hall in the temple of King Seti I in Abydos to describe the sanctuary of the god Osiris in the temple.(Fig.7).



*'Irt n. f iwnn w'b hr b3kt n t3 -dsr
 (The making for him a purely (temple-shrine) the building in the sacred Land)⁽³⁾*



**Fig.7: The sanctuary of the god Osiris in the temple of King Seti I in Abydos.
 (By Author).**

¹ Kitchen, K. A., *Ramesside Inscriptions Historical and Biographical*, Vol. I, Oxford, 1975, p.131 .

² Kitchen, K.A., *Ramesside Inscriptions*, p.42 .

³ Mariette, A., *Abydos I, description des fouilles*, Vol. I, Paris, 1869, Pl.19, e .

"Iwan" An analytical Study of Rooting and Associated Architectural Elements in Ancient Civilizations

This term may refer to the temple ⁽¹⁾, and I do not agree with this opinion, which may have been based on the fact that the building of *iwnn* was in the sacred Land, and what is meant here is Abydos, as by reviewing the texts accompanying this text, it becomes clear that it describes the sanctuary of Osiris and not the temple. (Fig.8). The second time the term is mentioned in the sense of sanctuary:



Irt n . f m mnw . f n it . f Wsir hry - ib hwt Mn m3't r' irt n . f hwt - ntr w'bt iwnn nt nhh

(He established his monuments for his father, Osiris, residing in the temple of Mn-Maat-Ra, The making for him a pure temple and a sanctuary for eternity)⁽²⁾.

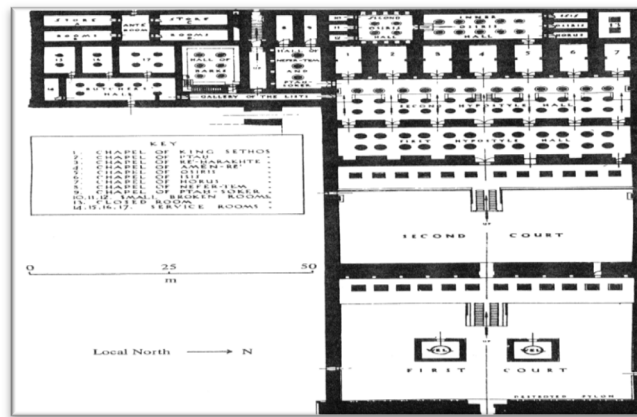


Fig.8: The Temple of Seti I in Abydos (After: Calverly, A., and Broome, M., The temple of King Sethos I at Abydos, Vol. I, London, 1933, Pl.1.

The text is repeated again from the outer lintel of the sanctuary of Osiris in the Temple of Seti I in Abydos.



Irt n.f iwnn n dt

(The making for him a sanctuary for eternity)⁽³⁾.

The term *iwnn* can sometimes mean a sacred place or ritual center, which receives gifts and offerings ⁽⁴⁾. As stated in the text of King Thutmose III of Karnak:



... hsw m 3pdw r sdf iwnn . sn šps

(The area of wild birds, namely ducks, to supply their honorable shrines)⁽⁵⁾.

The second text of King Tutankhamun from Karnak:



¹ Spencer, P., The Egyptian Temple, p.102 .
² Kitchen, K. A., Ramesside Inscriptions, p.164 .
³ Kitchen, K. A., Ramesside Inscriptions, p.155 .
⁴ Spencer, P., The Egyptian Temple, p. 103 .
⁵ Helck, W., Urkunden der 18. Dynastie, Heft 17, Berlin, 1955, p.1259. .



hr kd iwnnw sn m m3wt m mnw hnti nhh smnh hr hr dt hr w3h n sn ntr htpw
(Building their chapels anew as monuments to the span of eternity, endowing
with property forever, enduring for them the sacred offerings) ⁽¹⁾.

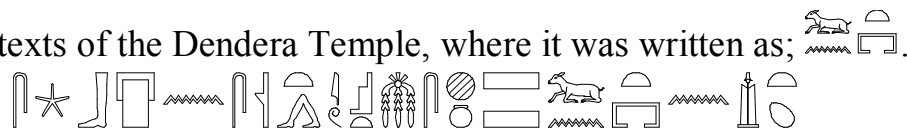
However, it is noted that in the two texts the term meant the chapel, which was naturally a sacred place (a building) where rituals were performed and sacrifices were made. There is a text from the Nineteenth Dynasty that refers to a building for King Senwosret I (1962-1928 BC) in Heliopolis as



Ir n .(k) mnw . k m iwnn ntrw



(You erected your monuments as a shrine (temple) for the gods) ⁽²⁾.

This term may not have been applied to the building at the time of its construction ⁽³⁾. It is possible that the term existed in the Middle Kingdom, although it did not reach us from that era. This term was used in the Ptolemaic period in the texts of the Dendera Temple, where it was written as;



sb3 n skd iw st mshn iwnn n Twnt

(A gate will be built in the place of rest, the shrine (temple) of Dendera) ⁽⁴⁾.

The term *iwnn* was mentioned again in this way  in the texts of the Temple of Dendera ⁽⁵⁾. There are other texts from the Ptolemaic period in which the term is mentioned, as it was mentioned twice in the same form  in the texts of the temple of the god Montu in Karnak during the reign of King Ptolemy III (Euragitis) ⁽⁶⁾.

The frequent mention and use of the term '*iwnn*' in the texts of the Ptolemaic period indicates its existence as a generally accepted term to denote the chapels of the gods. But we do not find the term after that in the demotic or Coptic texts.

¹Helck, W., *Urkunden der 18. Dynastie*, Heft 22, p.2029.

²Stern, L., *Urknude über den Ban des sonnentempels zu on. Eine hieratische handschrift auf Leder im königlichen Mueum zu Berlin*, ZÄS 12, 1874, p.89.


³Spencer, P., *The Egyptian Temple*, p.103.

⁴Mariette, A., *Dendérah description générale du Temple de cette ville*, Vol. II, Paris, 1870, Pl.34.

⁵Mariette, A., *Dendérah*, Pl. 82.c.

⁶Sethe, K., *Thebanische Templinschriften aus Griechisch-Römischer Zeit I*, Urk VIII, Berlin, 1957, 16,d.

2- The term and architectural element  'Iwnyt' ⁽¹⁾

It should be noted that there is also an architectural term and element close in pronunciation and spelling to *iwnn* which is *iwnyt*, It means pillared hall², hall of columns⁽³⁾, columned hall⁽⁴⁾. And an open courtyard decorated with columns, which surround it from the sides. All synonyms give the same meaning and the concept that *'Iwnyt* is a pillared hall, which is quite different from *'Iwnn* in design and function. It is clear that the term *iwnyt* derives from the name of the column  (*iwn*)⁽⁵⁾ that supports the roof. *'Iwnyt* is also very close to the Iwan in the Islamic and Persian civilizations. The oldest mention of the term came from the Kheiti tomb in Asyut of the Tenth Dynasty (2160-2040 BC). This pillared hall was in the temple of Wepwawet, there is nothing left of it⁽⁶⁾.



mk wnn rn.k r nhh m hwt -ntr nt Wp- w3wt s3m . k nfr m iwnyt

(See your name will exist for ever in the temple of Wepwawet , your memory will be fine in the pillared hall) ⁽⁷⁾.





The term *iwnyt* was mentioned in the Eighteenth Dynasty in a text by King Thutmose I to describe the colonnaded court at Karnak⁽⁸⁾.



'Ir.n. f m mnw.f n it.f'Imn r' hry tp t3wy irt . n.f iwnyt 3pst

(He made his monuments for his father Amun-Rem chief of the two lands, the making for him a noble columned hall) ⁽⁹⁾.

'Iwnyt was also mentioned on the base of an obelisk in Karnak from the reign of Queen Hatshepsut⁽¹⁰⁾.

¹There were many terms in the ancient Egyptian language that expressed the halls and courts of the temple, including:  *w3dyt*,  *wshyt*,  *wshyt-hbyyt*,  *hrt-ib* For more see : Spencer , P., The Egyptian Temple, pp.63-7.

²Faulkner, R.,,A Concise Dictionary of Middle Egyptian, Oxford, 1964, p.13.

³ Gardinar, A., Egyptian Grammar being an introduction to the study of Hieroglyphs, Oxford, 2007, p.495 (sign – list O.28).

⁴ Badawy, A., and Kees, H., Handwoerterebuch der Aegyptischen Sprache, Cairo, 1958, p.13.

⁵Erman ,A., and Grapow H., Wörterbuch der ägyptischen sprache, Vol. I ,Berlin, 1971, p.53.

⁶Spencer, P., The Egyptian Temple, p.64.

⁷ Griffith, F.,L., The Inscriptions of Siüt and Dêr Rîfeh, London, 1889, Pl.13.23.24.

⁸ Spencer, P., The Egyptian Temple, p.64.

⁹Sethe,K., Urkunden der 18. Dynastie, Vol. II, 1906,p.92 .

¹⁰ Spencer, P., The Egyptian Temple, p.65.



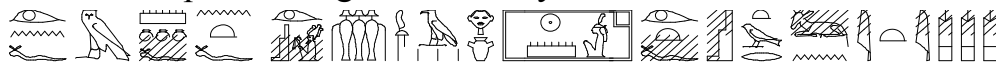
Ib.i hr hrp r irt n.f thnwy m d'm bnbn .sn zbh m hryt m iwnyt špst
(My heart led me to make for him two obelisks in electrum, their pyramidions merged with heaven, in the noble columned hall) ⁽¹⁾.

From the context, we conclude that the term here means an open courtyard. *Iwnyt* occurs in the almost identical building – texts of the king Amenhotep II from Amada and Elephantine ⁽²⁾.



irt . n . f bhnt wrt m inr rwdt hft-hr wsht hbyr m iwnyt špst phr m iwnw n rwdt
(Making for him a great pylon in sandstone in front of the forecourt, namely a noble columned hall, surrounded by Sandstone columns) ⁽³⁾.

This description indicates that *iwnyt* meant the open courtyard surrounded by columns bearing the side roofs. The term *iwnyt* came in a text from the sanctuary of Osiris in the temple of King Seti I in Abydos.



Ir . n . f m mnw . f n it . f Wsir hnty - imntyw hryt ib hwt Mn m3't r' irt .(n) . f st - wrt iwnyt

(He made his monuments for his father Osiris chief of westerners residing in the temple of Men-maat-re the making for him sanctuary and columned hall) ⁽⁴⁾.

Iwnyt here means (the hypostyle hall) attached to the sanctuary of Osiris in the Temple of Seti I at Abydos (fig.9), and covered with a roof carried on columns. There is a view that *iwnyt* has become a generic term applied to any type of hall ⁽⁵⁾, whether covered or uncovered, and this is what we understand from the earlier texts. However, the term did not persist in the Demotic or Coptic texts. *Iwnn* is very close in pronunciation and design to 'iwan' in Persian architecture, which may make it the origin from which architects in Persian architecture derived the ayvan (iwan). The Apadana in Persian architecture is similar in design to the *Iwnyt* (pillar hall) in Egyptian architecture, although the two have different pronunciations. There are many synonyms referring to architectural

¹Sethe, K., *Urkunden der 18. Dynastie*, 1906, p.365.

²Spencer, P., *The Egyptian Temple*, p.66.

³Helck, W., *Urkunden der 18. Dynastie*, Heft 17, p.1295.

⁴Kitchen, K., A., *Ramesside Inscriptions*, p.163.

⁵Spencer, P., *The Egyptian Temple*, p.66.

installations, especially since the eighteenth dynasty. The rule of the kings of the Eighteenth Dynasty marked the beginning of an important historical era, marked by the establishment of the first empire in history, which extended from the Euphrates River in Asia in the north to Upper Nubia in Africa in the south. The Kings of that powerful country were keen to devote their biography and highlight the country's greatness, wealth, and prosperity by constructing great structures such as temples, shrines, tombs, and colossal statues. This was reflected in the ancient Egyptian language in the use of new terms and many synonyms in addition to what was previously known. Which were in use until the Ptolemaic period, such as *Iwnn* and *Iwnyt*, while the most famous and most widely used of them continued to be used in the Coptic language.



Fig.9: The Hall of Columns 'Iwnyt' attached to the sanctuary of Osiris in the Temple of Seti I in Abydos (By Author).

Fourth: How and when did the term and the architectural element iwan move from the Egyptian civilization to the Persian civilization

Cambyes invaded Egypt in 526 BC, he and his successors formed the twenty-seventh dynasty in the order of Egyptian rulers. There is no Persian influence on Egyptian political or cultural institutions. On the contrary, the Achaemenid emperors appeared on the walls of the temples in the image of the kings of Egypt, worshiping the Egyptian gods and making offerings to them ⁽¹⁾.

The Achaemenids were influenced by the civilizations that preceded them, including the Babylonian, Assyrian, Levantine, and Anatolian civilizations, as well as the ancient Egyptian civilization. So they transferred many aspects of Egyptian civilization and culture to the seat of the Persian Empire. This was probably evident during the reign of Emperor Darius I (522-486 BC), who came to Egypt during the Persian military campaign and is credited with the greatest role in the development of Persian architecture ⁽²⁾. This appeared in some fortifications that were influenced by the Egyptian building style, and whose architects may have been Egyptians ⁽³⁾.

¹Colburn, H.P., *Archaeology of Empire in Achaemenid Egypt*, Edinburgh University Press,2003,pp.1-126

²Bell,E., *Early architecture in Western Asia, Chaldaean, Hittite, Assyrian, Persian*,London,1924, p.211.

³Herzfeld, E., *Iran in the ancient East*, p.226.

Since the reign of Cambyses, The Achaemenids transferred many skilled Egyptian artists, craftsmen, and workers to Persia to benefit from their expertise and skills, and it increased during the reign of Darius I, and continued with his successors. Persian records confirm that Emperor Darius I gathered workers from all the countries he conquered, including Egyptian workers, to work on construction sites in his capital, Susa. Darius wanted to highlight the concept of their desire for teamwork. But the truth was that this was at the behest of the imperial authorities ⁽¹⁾.

It is worth noting that Egyptian antiquities were found near Apadana, dating back to the thirty-fourth year of the reign of Darius ⁽²⁾. The Persepolis Archives record many classes of Egyptian laborers who were transported to Persia. One document (PT 15) indicates that Egyptian workers were involved in the construction of a palace in or near Persepolis, but it does not specify the nature of their work ⁽³⁾. Darius gave orders to the Egyptian priest, Udjahorresne, to instruct the children of the Persian nobles. Darius had a personal interest in Egyptian religion, so he studied theology with priests while in Egypt ⁽⁴⁾. Egyptian workers transferred many Egyptian civilizational features to the Achaemenids. The statue of Darius I, which was in Susa, was carved in Egypt. Egyptian statues and stone vessels have also been found in Persia. In addition to the architectural elements that had a religious concept for the ancient Egyptians. Such as the winged sun disk that crowned the doors of the palaces of Darius and Xerxes in Persepolis and the facade of the royal tombs in Naqsh-e Rostam. And Egyptian palm-leaf capitals with attached papyrus buds, which crowned the colossal columns in the Apadana of Persepolis ⁽⁵⁾. It is likely that the term and the architectural element 'iwnn' which architecturally refers to the chapel in the Egyptian temple, were transferred in the same manner, at the same time, and by the same workers from Egypt to Persia, and possibly also the term 'iwnyt' and its architectural significance.

¹Briant,P.,Susa and Elam in the Achaemenid Empire,in, *The Palace of Darius at Susa. The Great Royal Residence of Achaemenid Persia*, Ed. Perrot, J., London, 2013, pp.18-20.

²Porter, B.,and Moss, R., *Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs and Paintings* ,Vol. VII, Nubia, The Deserts and outside Egypt, Oxford, 1995, pp.397-8.

³Henkelman, W.F. M., *Anhang: Egyptians in the Persepolis Archives*, In: Wasmuth, M., *Ägypto-persische Herrscherund Herrschaftspräsentation in der Achämenidenzeit, oriens et occidens Studien zu antiken Kulturkontakten und ihrem Nachleben* ,Vol. 27, 2017, p.294.

⁴Klotz, D., *Adoration of the ram: Five hymns to Amun-Re from Hibis Temple*, Yale Egyptological Studies 6, New Haven: Yale Egyptological Seminar, 2006, pp.6-7.

⁵Arnold, D., *Temples of the Last pharaohs*, New York , 1999, p,69.

Results and Conclusions

The Iwan in Islamic architecture was an essential element (a hall with three walls, an open facade, and a vaulted ceiling) in the design of the mosque, mausoleum, caravansarai, garden pavilion, and palace and madrasa. The dictionaries of the Arabic language regard the iwan as a Persian term. Iwan in Persian is called "ayvān" (palace, veranda, balcony, portico).

ayvān derives from "apadāna" which is an old Persian term refers to audience halls (the pillared hall, palace, or audience hall built of stone with columns).

The earliest examples of the iwan in its traditional form date back to the Parthian period. In the Sasanian period, the iwans reached a great degree of development.

The ambiguity of the origin of the Iwan (Persia, Mesopotamia, Eastern Anatolia) with no evidence of hypotheses about its origins. With the inability to equate the Persian and Arabic word ayvān with the form art historians call ayvan. Because the iwan has linguistic and architectural roots that are older in time and farther spatially, this is the ancient Egyptian civilization.

The temple in ancient Egypt had a semi-traditional design. At its end were the chapels of the gods (the holy of holies) and the dwelling place of the god and his seat in the temple, where the statue of the god or the king and his sacred symbols were placed.

There were many terms in the ancient Egyptian language that were used to describe the chapels of the temple, among them is *Iwnn*, and this term was known from the era of the New Kingdom, and it was used until the Ptolemaic period. These chapels '*Iwnn*' are still almost completely preserved to this day.

It is a rectangular building with three walls, open from the front, and its ceiling is vaulted. This planning began since the rule of the First Dynasty, around 3200 BC, and continued until the end of the ancient Egyptian civilization. It is likely that the design and name of the chapel (*Iwnn*) were transferred from Egypt to Persia after the Achaemenid conquest of Egypt.

By Egyptian workers and artists, they were taken to the capital of the Achaemenids to participate in the construction there. This is due to the influence of the Egyptian civilization on the Achaemenid emperors, especially since the name Iwnn appeared near this time under his Persian name (ayvan) there. The design of the Apadana is very similar to the pillared halls in Egyptian temples, which were sometimes called *Iwnyt*.

BIBLIOGRAPHY

- **Al-wakil, Abdul-wahed**, The principles of Traditional design of Mosques, symposium on Mosque architecture, Vol.10B, Colleague of architecture & planning King Saud University, 1999, pp.1-5
- **Anisi, A.**, Early Islamic architecture in Iran (637-1059), The University of Edinburgh Press, 2007.
- **Arnold, D.**, Temples of the last pharaohs, New York,1999.
- _____, The Encyclopedia of Ancient Egyptian Architecture, London . 2003.
- **Ayrton, E.; Currelly, M., & Weigall, A.**, Abydos, Vol. III, London,1904.
- **Badawy, A., & Kees, H.**, Handwoerterebuch der Aegyptischen Sprache, Cairo, 1958.
- **Bell, E.**, Early architecture in Western Asia, Chaldaean, Hittite, Assyrian, Persian, London,1924.
- **Briant, P.**, Susa and Elam in the Achaemenid Empire, In: The Palace of Darius at Susa. The Great Royal Residence of Achaemenid Persia, Ed. Perrot, J., London, 2013.
- **Calverly, A., and Broome, M.**, The temple of king Sethos1 at Abydos, Vol.I, London,1933.
- **Colburn, H.P.**, Archaeology of Empire in Achaemenid Egypt, Edinburgh University Press,2003.
- **Eilers, W.**, Iran and Mesopotamia, in, the Cambridge history of Iran Vol.III , the Seleucid, Parthian and Sasanian periods, edited by Yarshatere, E., Cambridge, 2000.
- **Erman, A. and Grapow H.**, Wörterbuch der ägyptischen Sprache,Vol. I , Berlin,1971.
- **Faulkner, R.**, A Concise Dictionary of Middle Egyptian, Oxford,1964.
- **Gardinar, A.**, Egyptian Grammar being an introduction to the study of Hieroglyphs, Oxford, 2007.
- **Grabar, O.**, "AYVĀN", Encyclopaedia Iranica, Vol. III, 2011 [1987].
- **Griffith, F.L.**, The inscriptions of Siût and Dêr Rîfeh, London,1889.
- **Helck,W.**, Urkunden der 18. Dynastie, Heft 17, Berlin, 1955.
- _____, Urkunden der 18. Dynastie, Heft 22, Berlin,1958.
- _____, Temelarchitektur, Lexikon der Ägyptologie, VI, Wiesbaden,1986.
- **Henkelman, W.F. M.**, Anhang: Egyptians in the Persepolis Archives, In: Wasmuth, M., Ägypto-persische Herrscher und Herrschaftspräsentation in der Achämenidenzeit, oriens et occidentes Studien zu antiken Kulturkontakten und ihrem Nachleben, Vol. 27, 2017.
- **Henning,W.B.**, Brāhman, transactions of the philological society, London,1944.
- **Herzfeld, E.**, Iran in the ancient East, London,1941.
- **Keall, E. J.**, ayvān-e Kesrā, In: Yarshater, Ehsan (Ed.). Encyclopædia Iranica, Vol. III/2, 2012.
- **Kitchen,K.A.**, Ramesside Inscriptions Historical and Biographical, Vol. I, Oxford, 1975.

"Iwan" An analytical Study of Roofing and Associated Architectural Elements in Ancient Civilizations

-
- **Klotz, D.**, Adoration of the ram: Five hymns to Amun-Re from Hibis Temple. Yale Egyptological Studies 6, New Haven:Yale Egyptological Seminar, 2006.
 - **Klug, A.**, Königliche stelen in der zeit von Ahmose bis Amenophis III, Mon Aeg VIII, Brepols, 2002.
 - **Mariette, A.**, Abydos I, description des fouilles, Vol. I, Paris,1869.
 - _____., Dendérah description générale du Temple de cette ville, Vol. II, Paris,1870.
 - **Peker,A.,U.**, The Monumental Iwan: A symbolic space or a functional Device?, METU JFA, 1991.
 - **Petrie,W.M.F.**, The Royal tombs of the earliest Dynasties, Vol. II, London. 1901.
 - **Porter,B., and Moss, R.**, Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and ,Paintings ,Vol. VII, Oxford, 1995.
 - **Schmitt,R. and Stronach,D.**, 'Apadana' Encyclopædia Iranica II/2, 1987.
 - **Sethe,K.**, Urkunden der 18. Dynastie, Vol.I, Leipzig. 1906.
 - _____., Urkunden der 18. Dynastie, Vol.II, Leipzig. 1906.
 - _____., Urkunden der 18. Dynastie, Vol.III, Leipzig. 1907.
 - _____.,Thebanische Templinschriften aus Griechisch – Römischer Zeit I, Urk VIII, Berlin, 1957.
 - **Spencer, P.**, Studies in the lexicography of ancient Egyptian buildings and their parts, London,1981.
 - _____.,The Egyptian Temple a lexicographical study, London,1984.
 - **Stern, L.**, Urknude über den Ban des sonnentempels zu Eine hieratische handschrift auf Leder im königlichen Mueum zu Berlin, ZÄS 12, 1874.
 - **Taghizadeh,K.**, An Investigation of Historical Structures in Iranian Ancient Architecture, Architecture Research, 2012.
 - Talee,Sinan, Mohammad, and Shareef, Anwar Meshal, The Design Characteristics of the Architectural Elements in the Houses of the Old Mosul City, An Analytical Study of the Iwan Element, Al-Rafidain Engineering Journal , Vol.26, No.2, October 2021.

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