

The Egyptian Pomegranate in the New Kingdom

In 1922 in the Valley of the Kings, Egypt, Howard Carter discovered the tomb of the 18th dynasty Pharaoh Tutankhamun. This tomb, labeled KV62, was robbed in antiquity, but still held the full complement of royal funerary equipment with which the king had been buried. Among the items recovered were two small vases (see figs. 1 and 2) in the shape of pomegranates (*Punica granatum*), a fruit that had only been imported into Egypt from Syro-Palestine about one hundred years earlier.¹ These vases, although not the first representations of the pomegranate in Egyptian art, provide a reference point for analyzing the symbolic function of this form and the circumstances surrounding its adaptation into the Egyptian artistic repertoire.² The process by which this foreign fruit became Egyptian gives insight into the workings of Egyptian artistic conventions and illuminates the fundamentally conservative nature of Egyptian representational practices. My analysis proceeds in two directions from these vases: from the larger silver vase (Cairo JE 62192, fig. 1) I examine the intrinsic characteristics of the pomegranate and its situation within Egyptian religious practices, from the smaller ivory vase (Cairo JE62198, fig. 2) I look at the characteristics of Egyptian art that provided a conceptual space that allowed the adoption of this motif and its historical antecedents in Egyptian art. Both

¹ Renate Germer, *Flora des pharaonischen Ägypten* (Mainz: Philipp von Zabern, 1985), 42, and Cheryl Ward, "Pomegranates in Eastern Mediterranean Contexts during the Late Bronze Age," *World Archaeology* 34: 3 (Feb., 2003): 536

² The earliest published depictions of the pomegranate divorced from its agricultural context in ancient Egyptian art are the 19 faience votive pomegranate models recovered from the tomb of the 18th dynasty king Amenhotep II, two of which are illustrated in André Wiese and Andreas Brodbeck, eds., *Tutankhamun: The Golden Beyond. Tomb Treasures from the Valley of the Kings* (Bonn: Antikemuseum Basel und Sammlung Ludwig, 2004), 160 -161.

analytical strategies are situated within the context of the religious/magical function of Egyptian art.



Figure 1. Silver Vase from KV 62.
<http://touregypt.net/museum/vase2page.htm> Figure 2.



Figure 2. Ivory Vase from KV 62.
<http://www.griffith.ox.ac.uk/gri/carter/040a-p0230.html>

Egyptian art is most productively seen as a solemn and sacred space of mediation between the living world and the equally important realm of the spirits and gods. It is clear from the inscriptions and the archaeological contexts that elite individual Egyptians had representations of themselves placed in their tombs or around temples in order for them to benefit in the afterlife through the devotions of the living. Offering food to an ancestor or a god was an act that attempted to bridge the divide between the worlds of the living and the deceased. The artistic re-presentation of these acts clearly serves the same mediatory function. The interaction with the spirits of the deceased and with the pantheon of deities in the afterworld promised by this type of communication was a vital part of ancient Egyptian life, and it was these shared understandings of the general workings of the supernatural world that held the Egyptian culture together for thousands of years. The two pomegranate vases, then, must be examined within this larger current of meanings and functions.

The larger of these two vases (JE62192) is a finely crafted piece made of electrum, but it appears silver. The silver color of this vase is unusual in that very few items in Tutankhamun's tomb were made of silver and this material is more commonly associated with products from the Aegean or Asia.³ The foreign character of the material is repeated in the foreign pomegranate form, but even if it were of foreign manufacture, this vase is instructive in what it suggests about the properties of the pomegranate fruit that made it amenable to inclusion in an Egyptian royal burial. The vase was found lying on its side, with a stopper made of rush inside it along with residue of a dark brown material that could not be identified.⁴ The vase measures 8.10 cm in diameter at its widest point across the body, with a 4.9 cm diameter neck. It stands 13.4 cm tall and its rim consists of nine triangular sepals representing the calyx, one of which was broken off in antiquity and placed inside the vase.⁵ The neck of the vase was wrapped with the remains of a rush binding that had originally secured the stopper and underneath this binding the surface of the vase was engraved with a floral patterned band that was repeated around the shoulder of the vessel and is described by Carter as comprising lily and poppy petals. Another decorative band inscribed around the body of the vase, Carter describes as made up of cornflowers and olive leaves.⁶

Other floral elements in Tutankhamun's tomb provide an Egyptian context and help to incorporate this vase thematically into magical or symbolic funerary ritual. This ritual use of specific flowers, paralleling the patterns on the silver vase, mediates some of the

³ It is possible that this piece was crafted in Asia and given to Tutankhamen or his predecessors as a gift from foreign rulers, as gifts of silver items including cups are mentioned in the Amarna letters. Thanks go to Dr. Peter Brand for suggesting this possibility.

⁴ Nicholas Reeves, ed., *The Complete Tutankhamun: The King. The Tomb. The Royal Treasure* (London: Thames and Hudson, 1990), 197.

⁵ *Ibid.*, 197.

⁶ Howard Carter, *The Tomb of Tutankhamen* (Japan: Excalibur Books, 1954), 208.

foreign-ness of the pomegranate form by tying it to traditionally Egyptian ideas and uses. The patterns of flowers from the decorative bands of the silver vase (lily, poppy, cornflowers, and olive leaves) are repeated with a little variation including the addition of pomegranate leaves, in floral collars found throughout the tomb. These collars were found draped around ten of the statues of deities in the tomb, around Tutankhamun's mummiiform coffin, and again around his famous gold mask (see fig 3). In the absence of explicative texts from the ancient Egyptians themselves, the symbolic meanings of these specific plants must remain speculative, although it is generally accepted that every element of a royal funeral functioned to help the deceased king negotiate the potentially dangerous journey through the Underworld to emerge reborn as a God with the rising sun on the Eastern horizon.⁷ Thus, it is reasonable to infer that these plants had been invested with powerful magical or effective properties that made them appropriate for aiding the king in this dangerous journey. The pomegranate, with its multiple seeds and blood-red juice, is likely to have been seen as naturally conducive to religious use in this context of danger and rebirth, although such assumptions must be made with caution. The pomegranate's strong association with funerary ritual in the New Kingdom does, however, lend support to the notion that it was being used symbolically to represent something more than food.

It is this blood-red juice of the pomegranate that suggests its suitability for funerary use and paradoxically provides a possible explanation for the choice to make this vase out of silver. Silver is a very rare metal in Egypt and has always been imported from Asia and the Aegean. During the Old Kingdom this trade was difficult and the value of silver

⁷ For a more detailed analysis of the plant materials from Tutankhamun's tomb, see F. Nigel Hepper, *Pharaoh's Flowers: The Botanical Treasures of Tutankhamun* (London: HMSO, 1990).



Figure 3. Floral Collar in KV62.
Reeves, *The Complete Tutankhamun*

was high compared to that of the more plentiful gold. During the Middle Kingdom, however, Egypt appears to have gained greater access to silver, causing a dramatic revaluing of the precious metals. Trade records show that silver was by that period worth half of the same amount of gold and this value held until at least the 19th dynasty.⁸ Although still rarer than gold, this relative lack of value in contrast to the many golden items in Tutankhamun's tomb suggests that the material of the silver vase was chosen for functional rather than prestige purposes. One possible function would have been to balance symbolically the color red that is implicit in the pomegranate form.

While color symbolism and magic in ancient Egypt is a very complex and somewhat speculative topic, there appears to be general consensus among scholars that the color red represented power and, at the same time, danger. Geraldine Pinch, an authoritative source in color symbolism, in a discussion of the magical interaction of vessels and liquids describes a scenario that appears to be relevant to the silver pomegranate vase:

⁸ Ian Shaw and Paul Nicholson, *The Dictionary of Ancient Egypt* (London: Harry N. Abrams, 1995), 271.

The end purposes of many spells were acts of transformation... The word for white has auspicious alternative meanings of light and silver. The metal silver was associated with the moon and with Thoth, the god of magical knowledge... Demotic spells sometimes specify that the pottery lamps and bowls used in divination *should be white rather than the normal red*, so that only benevolent spirits would be involved (Pinch 2001, 183, italics added).

This practice provides a precedent within the traditions of Egyptian ritual magic that allow an Egyptian usage and interpretation of the silver pomegranate vase in KV62. This vase could conceivably have been made of silver to counter the possible danger implicit in the red pomegranate color. This consideration would have been quite important, as the king must be successfully regenerated in order to keep the cosmos in functional order. That the other pomegranate vase in this tomb shows the conceptual inverse of this color scheme, ivory material deliberately painted a reddish color, lends further support to this interpretation.

The smaller ivory vase (JE62198) holds the same potential for magical symbolism as the silver vase, but it also offers a more art-historical analytical possibility. I refer to this piece as a vase because, as Carter notes, it is hollow, although it may not have been used as a container. It measures 6.5 centimeters in diameter at its widest point across the body, with the diameter of the neck measuring 2.3 centimeters, and it stands 7.9 centimeters tall. It is carved of ivory, although the source is not specified. Unlike the silver vase, it is a more realistic representational form. The calyx at the top consists of 8 jagged petals and Carter noted that it had been stained or painted “a dark reddy-brown colour” that he observed was “probably original.”⁹ Of particular importance to this piece is the distinctive incised marking on its body. This peculiar image has an elongated elliptical shape with terminal points and is oriented vertically along the vase, reaching almost from

⁹ Carter *The Howard Carter Archives* Card/Transcription Number 040a

the top of the body to the foot. The interior of this incised form is comprised of a double row of small, circular shapes. Carter was puzzled by this decorative element, suggesting in his initial notes that it might be a leaf or a sheaf of wheat.¹⁰

I suggest that this shape is not a discrete motif, superimposed on the pomegranate form, but, instead, it depicts a slit-like opening in the skin of the fruit exposing the multiple seeds inside. This peculiar feature, a kind of window into the pomegranate interior, can be seen in several painted scenes from non-royal tombs of the New Kingdom.¹¹ For example, Theban Tomb T51, belonging to the high priest Userhat features a wall painting in which Userhat sits before an offering table, in the shade of a sycamore fig. On top of a pile of figs on his offering table is a single pomegranate, depicted with the same slit-like opening as Tutankhamun's small ivory vase. Because of this feature, the small ivory vase, of all of the New Kingdom pomegranate forms, most securely situates the pomegranate motif within the ancient traditions of Egyptian art, and also provides some evidence for the interpretation of this fruit as a symbol of regeneration appropriate to an Egyptian funerary context. This type of marking was used in artistic representations of Egyptian sycamore figs (*Ficus sycomorus*) before the advent of the pomegranate, and can be found on these pieces from at least the Middle Kingdom (Petrie Museum UC 45574, see fig. 4). Figs themselves have been integrally associated with funerary ritual in Egypt since the formative period of Egyptian culture, and it is this representational niche, existing already in Egyptian symbolic art, that provided the

¹⁰ Ibid

¹¹ This peculiarity can be found in offering scenes from the tombs of the high priest Userhat (T51) as well as the tomb of the sculptor Ipuy (T217), both published in Charles K. Wilkinson, *Egyptian Wall Paintings: The Metropolitan Museum of Art's Collection of Facsimiles* (New York: The Metropolitan Museum of Art, 1983). The Ipuy tomb scene appears as Figure 32 and the Userhat tomb scene appears as Figure 39.



Figure 4. Faience Fig with Black Slit
Petrie Museum UC45574

conceptual space into which the pomegranate could be adopted and utilized without the risk of radically affecting the Egyptian symbolic system.

The ritual and symbolic association of the fig with death and regeneration can be traced through the documented history of Egyptian funerary art and even earlier. Remains of roots and stumps from around graves at Cemetery 1400-1500 at Armant dating from Naqada I, II, and III (ca. 4000 to 3200 BCE) show that at the time of the interments, this cemetery was located in a large grove of sycamore and acacia trees.¹² The practice of provisioning the deceased with figs was sanctioned, if not explicitly required, by the Pyramid Text Utterance 440 which states that “Those whom the God loves... live on figs...”¹³ Figs are first attested in stone on a painted, relief-carved niche-stone from the 2nd dynasty (ca. 2980-2780 BCE). In this scene a man in leopard print clothing is seated in front of a table containing four half-loaves of bread and surrounded by depictions of other food offerings. Between the base of the table and the man’s shins is the (damaged)

¹² Kathryn Bard, “A Quantitative Analysis of the Predynastic Burials in Armant Cemetery 1400-1500,” *JEA* 74 (1988): 39.

¹³ Alix Wilkinson, *The Garden in Ancient Egypt* (London: The Rubicon Press, 1998), 45.

hieroglyph for a string of figs above a basket of these fruit.¹⁴ This tradition continues through the Old Kingdom on slab stelae from the Giza necropolis, where the fig is often supplemented at the offering table with other fruits and grains including the perseia fruit (*Mimusops schimperi*).¹⁵

Building on these Old Kingdom representational traditions, artists of the Middle Kingdom (ca. 2134 to 1991 BCE) developed the practice of including miniature models of servants and equipment with the funerary offerings to assist the deceased in the afterlife. This innovation extended to representations of fruit. Models of figs and of various other funerary fruits and vegetables, made of multiple materials including glass and faience, are found in these tomb contexts. It is amongst these examples of model figs that the peculiar incised decoration on the small ivory vase from Tutankhamun's tomb becomes legible. Many of these surviving models are marked with a thick, dark line that runs vertically along the body of the fruit (see fig. 4). This mark represents the gash that resulted from the Egyptian farmers' practice of cutting into the fruit to secure the ripening process. Although pomegranates were not punctured to assist ripening, the representation of an opening in the rind of the ivory vase from KV62 suggests a very strong conceptual link between these fruits.

There are many other factors that support a strong conceptual link between the pomegranate and the fig. One of the most direct is the medicinal usage of both plants as a vermifuge. Egyptian medical papyri consistently list pomegranate root along with a sycomore fig preparation for treating intestinal worms. In fact, the active ingredient in the

¹⁴ This is my translation and interpretation. Illustrations of this niche-stone can be found in W. Stevenson Smith. *The Art and Architecture of Ancient Egypt*. (New Haven and London: Yale University Press, 1998), Fig. 32.

¹⁵ The Wepemnofret Stela (Hearst Museum, Berkeley 6-19825), for example, lists his offerings as 1000 bowls of figs and 1000 bowls of perseia fruit, among other items.

pomegranate prescription, pelletrin, is still used for this purpose.¹⁶ This functional connection was surely not missed by Egyptian artists, and could have added another layer of shared symbolic meaning.

While the fig was securing its status as the funerary fruit *par excellence* in Egypt, the pomegranate was slowly making its way to the Nile Valley from its origins in Mesopotamia, accumulating symbolic significance from many cultures along the way. The earliest attested representation of the pomegranate dates the 4th millennium BCE and comes from a tall, relief-carved vase, from the Temple of the Goddess Inanna at Uruk, east of the Euphrates River in current day Iraq (National Museum of Iraq, IM19606). In this ritual scene, the pomegranate is implicated in the worship of that goddess and her realm of sexual love, fertility, and warfare, although the extent of the symbolic use of the pomegranate in this context is far from clear.¹⁷ From Mesopotamia, cultivation of the pomegranate spread to the Mediterranean where its presence is attested in the Syro-Palestine area by at least the 17th century BCE — corresponding to the Hyksos period of Egyptian history — in the form of a pomegranate-shaped wooden box recovered from a tomb context in current day Jericho, Israel. This usage testifies to the symbolic function of the pomegranate by the Asian neighbors of Egypt at that time.¹⁸ It is also attested at elite residences on Minoan Crete from at least the late 18th century BCE in the form of ceramic, fruit-shaped vases, again suggesting a magical, symbolic, or religious function.¹⁹

¹⁶ James P. Allen, *The Art of Medicine in Ancient Egypt* (New Haven and London: Yale University Press, 2005), 42.

¹⁷ F. Muthmann, *Der Granatapfel: Symbol des Lebens in der alten Welt*. (Bern: Office du Livre, 1982), 13.

¹⁸ Sara A. Immerwahr, "The Pomegranate Vase: Its Origins and Continuity," *Hesperia* 58, no. 4 (Oct.–Dec., 1989): 402.

¹⁹ Cheryl Ward, "Pomegranates in Eastern Mediterranean Contexts during the Late Bronze Age," *World Archaeology* 34, no. 3 (Feb., 2003): 534.

Interestingly, the pomegranate appears to have been known to the Hyksos rulers of Egypt during the Second Intermediate Period, as is evidenced by the recovery of seeds from an elite residence at Tell el-Dab'a.²⁰ This familiarity with the fruit, however, appears to have been confined to the Hyksos elite. There are no surviving representations of pomegranates in Egyptian art from this period, and traces of the pomegranate itself are not seen in Egypt again until the late 14th century BCE, during the 18th dynasty. After the expulsion of the Hyksos at the end of the Second Intermediate Period, a succession of New Kingdom pharaohs engaged in wars of conquest, establishing an Egyptian imperial presence throughout the Eastern Mediterranean and occupying the Syro-Palestinian lands. These Egyptian conquerors brought pomegranate plants back to Egypt where they became established in palace and temple gardens as well as in the private gardens of some elite individuals. The introduction of the pomegranate into the Egyptian garden can be traced to the reign of the 18th dynasty King Thutmose I, via an inscription in the tomb of his courtier Ineni. At first this plant appears to have been used as a garden plant and prized for its exotic strangeness. Within the span of about 100 years, however, there are clear indications that this plant was being used symbolically in funerary ritual, in ways that are not clearly associated strictly with its use as a garden plant.

Significantly, after the introduction of the pomegranate into the Egyptian elite garden during the 18th dynasty, this tree and its fruit only appeared in garden contexts, beginning with its first mention in the tomb of the nobleman Ineni, where it was listed along with sycomore figs, persea, and other plants and trees as a prized garden specimen. Two reigns later, the Pharaoh Thutmose III had the pomegranate tree and its fruit depicted in what is

²⁰ Ward "Pomegranates," 535.

now known as the “Botanical Garden” scene at Karnak, along with other plants. Two inscriptions in room 31 of the Karnak Temple recount the official origin of the plants represented on the walls, describing them as having been brought back by His Majesty from his conquest of the lands to the North.²¹ Soon after this, in the tomb of King Amenhotep II, 19 votive faience pomegranates were recovered, clearly breaking from a strictly garden association and suggesting that the pomegranate had not only acquired symbolic associations with regeneration and rebirth apart from its use as a food, but that it had become Egyptian to the extent that it could be used to assist a king in the afterlife. The speed with which the pomegranate became Egyptian in this sense can only be explained by the availability of the very Egyptian fig as a precursor.²²

Approximate dates BCE	Pharaoh	Pomegranate Evidence
1504-1492	Thutmose I	His courtier Ineni lists the tree in his tomb among other garden plants
1492-1479	Thutmose II	
1479-1425	Thutmose III	The tree is depicted and named on Karnak Temple wall, along with other booty from Asian wars
1473-1458	Hatshepsut	
1427-1401	Amenhotep II	19 faience pomegranate models recovered from his tomb
1401-1391	Thutmose IV	
1391-1353	Amenhotep III	
1353-1335	Amenhotep IV/ Akhenaten	Tree depicted along with other trees in tomb of Meryre, High Priest of Aten, in depiction of the garden of the sun at el-Amarna.
1335-1333	Smenkhkara/ Neferneferuaten	
1333-1323	Tutankhamun	2 pomegranate vases in tomb as well as use of plant material in floral wreaths

Figure 5. Time line of Pomegranate appearance in the 18th Dynasty.

Adapted from Robins, *The Art of Ancient Egypt*

²¹ Jean-Claude Hugonot, *Le jardin dans l’Egypte ancienne* (Frankfurt: Peter Lang, 1989), 37.

²² For an approximate timeline of the pomegranate’s use in Egyptian art, see figure 6.

This use of the pomegranate in funerary ritual was visually and semantically tied to the use of the fig. Depictions of pomegranates and figs occur together regularly in funerary and temple contexts. Of particular interest is a block from the 18th and 19th dynasty, recovered from the Sacred Animal Necropolis of Saqqara, upon which is depicted two mourners standing by two funerary booths with food and floral offerings (see fig. 6).²³ Pomegranates are depicted suspended from the roof of one kiosk while figs are strung and suspended from the roof of the neighboring kiosk in a manner that is reminiscent of the 2nd Dynasty niche stone description of strings of figs. This close association of the two fruits suggests a similar semantic framework and symbolic usage that would not have been possible at this time if the pomegranate had remained a foreign fruit. While earlier and later periods of pharaonic history saw the adaptation of foreign ideas and symbols into Egyptian usages, the period of the New Kingdom marks a particularly insular and nationalistic time for the Egyptian state.²⁴

The uses of the pomegranate in Egyptian funerary contexts from the New Kingdom, unlike its uses elsewhere in the ancient world, are not associated with any particular god or gods.²⁵ The fig, in contrast, has strong associations with the goddess Hathor, who

²³ Published in Geoffrey Thorndike Martin, *Corpus of Reliefs of the New Kingdom from the Memphite Necropolis and Lower Egypt* (London: KPI. 1987), Plate 51.

²⁴ In support of this nationalistic exclusivity, is the clear lack of adaptation of foreign symbolism and motifs in spite of the Egyptian state occupation of areas from Nubia to current-day Turkey. Even the olive, introduced into Egypt as a cultivar at about the same time as the pomegranate, was not used symbolically as a motif. In spite of its economic importance, and its symbolic potential and usages in floral rituals, the olive was not incorporated into the artistic lexicon. The only instance of the olive in stone comes from Amarna where a branch with fruit is depicted in the left hand of the Pharaoh Akhenaten, described in John D. Cooney, *Amarna Reliefs from Hermopolis in American Collections* (Brooklyn: The Brooklyn Museum, 1965), 6.

²⁵ The pomegranate is associated with goddesses of fecundity and sexuality in many ancient Near Eastern cultures, most famously with Persephone of Greek mythology. While the pomegranate is not exclusively associated with women or female deities in ancient art, in his monumental work on the history of the pomegranate in the ancient world, Muthmann links the pomegranate to most major goddesses of the ancient Near East (Muthmann, *Der Granatapfel*).

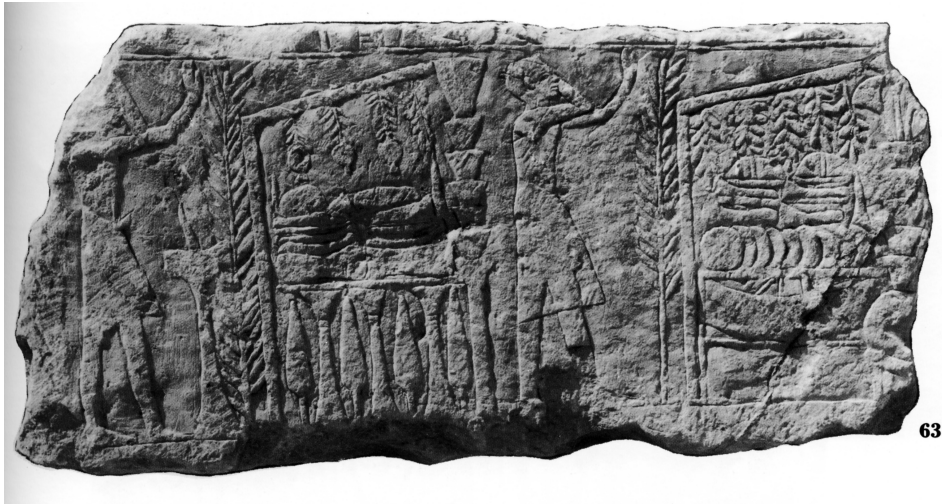


Figure 6. Funerary Kiosks with Pomegranates and Figs from Saqqara.
Martin, *Corpus of Reliefs of the New Kingdom*, Plate 50.

relates to female sexuality and fertility in Egyptian traditions.²⁶ The connection of the pomegranate with Hathor, however, is not made explicit in New Kingdom art. The choice to associate the pomegranate with the fig in traditionally Egyptian contexts, in effect, stripped the pomegranate of any associations with foreign symbolism, allowing Egyptian artists to use this new, exotic fruit in symbolically meaningful iterations and motifs. The usage of the pomegranate in Egyptian art of the New Kingdom points to the ways that the structural parameters within which Egyptian art could be produced functioned to preserve Egyptian cultural identity by resisting and selectively incorporating foreign influences.

²⁶ Hilary Wilson, "Sycamore and Fig" in *Discussions in Egyptology* 18 (1990): 79.

Bibliography

- Allen, James P. *The Art of Medicine in Ancient Egypt*. New Haven and London: Yale University Press, 2005.
- Bard, Kathryn. "A Quantitative Analysis of the Predynastic Burials in Armant Cemetery 1400-1500," *JEA* 74 (1988): 39-55.
- Beaux, Nathalie. *Le Cabinet de Curiosités de Thoutmosis III*. Leuven: Uitgeveru Peeters, 1992.
- Carter, Howard. *The Tomb of Tutankhamen*. Japan: Excalibur Books, 1954.
- Cooney, John D. *Amarna Reliefs from Hermopolis in American Collections*. Brooklyn: The Brooklyn Museum, 1965.
- Germer, Renate. *Flora des pharaonischen Ägypten*. Mainz: Philipp von Zabern, 1985.
- Helk, Wolfgang and Eberhard Otto. *Lexikon de Ägyptologie* 2 (1977): 891-892.
- Hepper, F. Nigel. *Pharaoh's Flowers: The Botanical Treasures of Tutankhamun*. London: HMSO, 1990.
- Hugonot, Jean-Claude. *Le jardin dans l'Égypte ancienne*. Frankfurt: Peter Lang, 1989.
- Immerwahr, Sara A. "The Pomegranate Vase: Its Origins and Continuity," *Hesperia* 58, no. 4 (Oct. – Dec. 1989): 397-410.
- Lurker, Manfred. *The Gods and Symbols of Ancient Egypt*. London: Thames and Hudson, 1980.
- Manniche, Lise. *An Ancient Egyptian Herbal*. Austin: University of Texas Press, 1989.
- Manuelian, Peter der. *Slab Stelae of the Giza Necropolis*. New Haven and Philadelphia: The Peabody Museum of Natural History of Yale University and the University of Pennsylvania Museum of Archaeology and Anthropology, 2003.
- Martin, Geoffrey Thorndike. *Corpus of Reliefs of the New Kingdom from the Memphite Necropolis and Lower Egypt*. London: KPI, 1987.
- Muthmann, F. *Der Granatapfel: Symbol des Lebens in der alten Welt*. Berne: Office du Livre, 1982.
- Nunn, John F. *Ancient Egyptian Medicine*. Norman, Oklahoma: University of Oklahoma Press, 1996.

- Pinch, Geraldine. "Red Things: the symbolism of colour in magic." In *Colour and Painting in Ancient Egypt*, edited by W. V. Davies, 182-185. London: The British Museum Press, 2001.
- Reeves, Nicholas. *The Complete Tutankhamun: The King. The Tomb. The Royal Treasure*. London: Thames and Hudson, 1990.
- Robins, Gay. *The Art of Ancient Egypt*. Massachusetts: Harvard University Press, 1997.
- Shaw, Ian and Paul Nicholson. *The Dictionary of Ancient Egypt*. London: Henry N. Abrams, 1995.
- Smith, W. Stevenson. *The Art and Architecture of Ancient Egypt*. New Haven and London: Yale University Press, 1998.
- Ward, Cheryl "Pomegranates in Eastern Mediterranean Contexts during the Late Bronze Age," *World Archaeology* 34, no. 3 (Feb. 2003): 529-541.
- Wiese, André and Andreas Brodbeck, eds. *Tutankhamun: The Golden Beyond. The Tomb Treasures from the Valley of the Kings*. Bonn: Antikemuseum Basel und Sammlung Ludwig, 2004.
- Wilkinson, Alix. *The Garden in Ancient Egypt*. London: The Rubicon Press, 1998.
- Wilkinson, Charles K. *Egyptian Wall Paintings: The Metropolitan Museum of Art's Collection of Facsimiles*. New York: The Metropolitan Museum of Art, 1983.