

# The Postmortem Agency of Tutankhamun (ca. 1336-1327 BCE)

*Danielle O. Phelps*

**Abstract:** The death of individual does not bring a loss of agency, but rather it develops into a new form that still has the ability to affect the living. The theoretical concept of postmortem agency is relatively new and has not been applied to the study of ancient Egyptian mortuary practices. However, the ancient Egyptians believed that the deceased as transformed entities could and would affect the living. The mummified human remains of Tutankhamun, the antepenultimate pharaoh of the Eighteenth Dynasty (ca. 1550-1295 BCE), presents a unique case study in to examining the postmortem agency of an ancient Egyptian king. In 1922, Howard Carter uncovered the tomb of Tutankhamun and observed that the tomb reflected an intentional change of Tutankhamun's identity from mortal king into that of a god, Osiris, in attempt to return to normative mortuary practices after the Amarna period. This paper suggests that Tutankhamun's body was intentionally manipulated into a sacred image, a statue, of the chthonic gods in order to help with the restoration process, but more importantly to help with the legitimization of his successor, Ay, to the throne of Egypt.

## Introduction

Howard Carter and Douglas Derry examined the mummified remains of Tutankhamun's (ca. 1336-1327 BCE)<sup>1</sup> in November 1925 (fig. 1).<sup>2</sup> After a thorough examination of the mummy, the amulets and jewelry found amongst the linen wrappings, and the coffins in which it lay, Carter concluded that Tutankhamun was 'scrupulously fashioned to represent and symbolize the one great god of the dead, Osiris.'<sup>3</sup> Since Carter's initial observation, other scholars such as Salima Ikram, have reaffirmed his assessment.<sup>4</sup> Other mummified remains of kings from the Eighteenth Dynasty (ca. 1550-1295 BCE), however, have not been designated as specifically representing Osiris in the physical form.<sup>5</sup> One explanation for the strong Osiris overtones

with the mummified remains of Tutankhamun is that they were a result of the religious antecedents of the previous reign of Akhenaten.

Tutankhamun's father, Akhenaten, had altered the traditional Egyptian religion and pantheon during his tumultuous reign. Akhenaten promoted the worship of the solar disk, the Aten, to the supreme god, and declared that the only intermediaries were himself and his immediate family, his wife, Nefertiti and their six daughters;<sup>6</sup> essentially disbanding

---

<sup>1</sup> The dates used in this paper are based on Shaw 2000.

<sup>2</sup> Carter 1927, 77.

<sup>3</sup> Carter 1927, 72.

<sup>4</sup> Ikram 2013.

<sup>5</sup> Smith 1912.

<sup>6</sup> Tutankhamun is most likely the son of Akhenaten and Nefertiti. His image was not recorded on any monument with his family, but the tradition of not showing the heir to the throne was not uncommon during the Eighteenth Dynasty. See Dodson 2009 for details.

the cults and priesthods of Amun and Osiris. The attitude towards the afterlife during the Amarna period ignored the traditional mythology of Osiris especially in regard to the mortuary patterns of the royal family and elite members of court. Instead the Aten held a more prominent role for the Amarna afterlife.<sup>7</sup> The Amarna beliefs affected the funerary rituals of the royal family and elites during the Amarna period. Previously elite members of society relied on the traditional mythology that favored the deceased individual being identified as a follower of the cult of Osiris in the afterlife.<sup>8</sup> This greatly changed the funerary rituals of the New Kingdom, which relied heavily on the traditional mythology that favored the deceased being identified with Osiris.<sup>9</sup>

The accession of Tutankhamun continued the return to orthodoxy which had begun during the reign of his predecessor.<sup>10</sup> Tutankhamun reopened the cultic centers of Amun and other gods as found mentioned on his restoration stela.<sup>11</sup> Of particular importance is the revival of the cult Osiris.<sup>12</sup> Evidence is found at the temple of Osiris at Abydos where a small wooden chest, which was covered with gold foil and containing the cartouches of Tutankhamun and images of Tutankhamun performing ritual acts in front of a plethora of deities, was found in a ceramic vessel.<sup>13</sup> His subsequent death provided on the opportunity to restore the traditional afterlife beliefs and practices especially those that invoked the image of Osiris. One way in which this was attempted was in the mummification of Tutankhamun's body. It was purposefully manipulated to represent the statue form of Osiris in order to help with the legitimacy of his



**Fig. 1: Mummified remains of Tutankhamun laying in the sand tray after the physical examination by Carter and Derry** (Burton photograph p1566). Photo reproduce with the permission of the Griffith Institute, Oxford.

successor, Ay. The ancient Egyptians believed that the gods would judge the dead as well as the living and as a result the deceased

<sup>7</sup> Smith 2017, 352.

<sup>8</sup> Smith 2008.

<sup>9</sup> Smith 2017, 285.

<sup>10</sup> Reeves 2005.

<sup>11</sup> Bennett 1939.

<sup>12</sup> In the Pyramid Texts from the Old Kingdom, the deceased king was not identified as a mere cult follower of Osiris but rather associated with Osiris, himself. See Faulkner 2007.

<sup>13</sup> Amélineau 1904, 348-350; Effland – Effland 2013, 32.

body could affect the living in a number of ways. Ay, the eventual successor<sup>14</sup> to Tutankhamun, needed to legitimize his succession to the throne, not just to the people of Egypt, but also in front of the gods. Ay purposefully manipulated Tutankhamun's body in order to strengthen his legitimacy to succeed Tutankhamun as king. The postmortem agency of Tutankhamun's body was used to promote specific cultural and religious identities that helped with the claims of inheritance and legitimacy for his successor, Ay.

### The Material Body

In archaeology, the body is the intersection of biology, physical representation, and material components.<sup>15</sup> It also has influenced the development of the 'archaeology of death,' which views it as direct reflection of social status within society;<sup>16</sup> in addition, the body is perceived as part of the symbolic and structural makeup of society.<sup>17</sup> More recent scholarship views the corpse of a deceased individual as a material object or artifact.<sup>18</sup> The body and the identity that goes with it, are considered to be actively constructed during life and then deconstructed and reconstructed once again in death through different social relationships.<sup>19</sup> When bodies are seen as objects, they become active entities which 'engage, influence, confine, or structure other social agents.'<sup>20</sup>

Agency is then a topic that can be broached when examining the physical remains of an

individual. It is a hotly debated topic in archaeology with little consensus, as there are numerous definitions.<sup>21</sup> Recently, in order to deal with agency in mortuary contexts, bioarchaeologists have introduced the term 'post-mortem agency.'<sup>22</sup> John J. Crandall and Debra L. Martin define postmortem agency as 'the ability of dead bodies (in their new guises as objects, spirits, relics, or other symbols, forms, or identities) to engage, influence, confine, or structure the behavior of the living whether directly or indirectly.'<sup>23</sup> In other words, though the individual that once inhabited the body is gone, the dead body still is an integral part of society that can affect the living in some capacity.

Postmortem agency is influenced by the theoretical concepts of Pierre Bourdieu,<sup>24</sup> Anthony Giddens,<sup>25</sup> Bruno Latour,<sup>26</sup> Alfred Gell,<sup>27</sup> and John Robb.<sup>28</sup> The first two theorists define agency in terms of human agents. Bourdieu believed that agency occurred in individuals who had awoken to the fact that society was organized arbitrarily and then that individual chose to act, with intent, to change the society's organization outside of it.<sup>29</sup> Giddens' view of agency contrasts with that of Bourdieu. Giddens suggests that agency is due to the capability of an individual's choice to intervene or not in the world with the effect of influencing processes that provide agency, not intentionality.<sup>30</sup> The capacity of an individual to act or not is inherent in a structural

<sup>14</sup> Tutankhamun had no children to succeed him and continue to the royal line. Two mummified fetuses were recovered in KV 62. Some have claimed them to be stillborn daughters of Tutankhamun, see Hawass – Saleem 2011; however, there remains doubts about the sex, see Charlier - Khung-Savatovsky - Huynh-Charlier 2012.

<sup>15</sup> Sofaer 2006, 11.

<sup>16</sup> Chapman – Kinnes – Randsborg. 1981; O'Shea 1984.

<sup>17</sup> Hodder 1982.

<sup>18</sup> Sofaer 2006.

<sup>19</sup> Arnold 2014, 525.

<sup>20</sup> Crandall – Martin 2014, 431.

<sup>21</sup> Dobres - Robb 2000.

<sup>22</sup> Crandall – Martin 2014; Tung 2014.

<sup>23</sup> Crandall – Martin 2014, 431.

<sup>24</sup> Bourdieu 1977.

<sup>25</sup> Giddens 1984.

<sup>26</sup> Latour 2005.

<sup>27</sup> Gell 1998.

<sup>28</sup> Robb 2004.

<sup>29</sup> Bourdieu 1977.

<sup>30</sup> Giddens 1984, 9.

system in which an individual's repetitive social practices keep producing social structures and those structures keep producing social practices.<sup>31</sup> Latour theorizes that even objects have agency.<sup>32</sup> He actively examines the associations and interactions between humans and objects and believes that objects plays significant roles in the forming, marking, and sustaining of social structures.<sup>33</sup>

Gell<sup>34</sup> and Robb<sup>35</sup> view agency in two distinct forms. Gell's two distinctions are primary, which is defined as individuals who can act on their own, and secondary agency, which are the objects or agents who only extend the agency of other agents.<sup>36</sup> Robb categorizes similar distinctions in agency but labels them as conscious agency and effective agency.<sup>37</sup> The nuanced difference between these two categories is important because it allows for the critical evaluation of 'how objects can be a nexus of social relations and have real impacts on social interactions, networks of power, and daily practices.'<sup>38</sup> Tiffany Tung takes their definitions further. Instead of relying on the categorical divide between human and non-human, Tung views agency based on sentient and non-sentient entities.<sup>39</sup> Sentient entities have primary/conscious agency; they act on their own volition. Non-sentient entities have secondary/effective agency in that they are deemed by individuals to not have volition, though they are still able to shape so-

cial interactions. The object-to-person interaction, therefore, is where identities are formed and power roles are determined.

### The Body of Tutankhamun

Tutankhamun was the antepenultimate pharaoh of the Eighteenth Dynasty (circa 1550-1295 BCE).<sup>40</sup> As stated above, he died at relatively young age: between sixteen and eighteen years old.<sup>41</sup> The cause of his death is still uncertain and greatly debated,<sup>42</sup> but evidence shows that he received many of the typical mortuary practices, including the mummification rituals, that were allotted to a king of Egypt. Tutankhamun was buried in a relatively small-chambered tomb on the floor of the Valley of the Kings across from modern day Luxor, Egypt.<sup>43</sup> In November 1925, the initial 'autopsy' on Tutankhamun's remains was performed.<sup>44</sup> Since Carter's examination, the physical remains have been examined only twice. The first occurred in 1968 when radiographic images were taken.<sup>45</sup> In 2005, a portable CT scanner was used to obtain computed tomography scans of the remains.<sup>46</sup>

The bioarchaeological evidence suggests a gracile individual with shrunken and attenuated soft tissues due to the embalming techniques employed during the mummification rituals.<sup>47</sup> The brittle nature of the long bones and the harsh examination techniques allowed for examination of the epiphyses unions of the humeri, radii, ulnas, femurs, and

<sup>31</sup> Tung 2014, 439.

<sup>32</sup> Latour 2005, 63.

<sup>33</sup> Tung 2014, 441.

<sup>34</sup> Gell 1998.

<sup>35</sup> Robb 2004.

<sup>36</sup> Gell 1998; Crandall – Martin 2014, 432; Tung 2014, 441–442.

<sup>37</sup> Robb 2004.

<sup>38</sup> Tung 2014, 441.

<sup>39</sup> Tung 2014, 442.

<sup>40</sup> Reeves 1990.

<sup>41</sup> See footnote 4 above.

<sup>42</sup> For a quick summary of the debates of Tutankhamun's death see Rühli – Ikram 2014.

<sup>43</sup> Carter – Mace 1923.

<sup>44</sup> Carter 1927, 19; Derry 1927.

<sup>45</sup> Harrison – Connolly – Abdalla 1969; Harrison – Abdalla 1972; Harrison – Gray 1973; Harris – Wenthe 1980.

<sup>46</sup> Hawass – Shafik – Rühli – Selim – El-Sheikh – Abdel Fatah – Amer – Gaballa – Gamal Eldfin – Egarter – Vigel 2009; Hawass 2010; 2013; 2015.

<sup>47</sup> Hawass – Shafik – Rühli – Selim – El-Sheikh – Abdel Fatah – Amer – Gaballa – Gamal Eldfin – Egarter – Vigel 2009.

tibias to determine Tutankhamun's age at death.<sup>48</sup> The bioarchaeological information suggests that Tutankhamun was around eighteen years of age at the time of his death.<sup>49</sup>

Postmortem trauma is apparent in several locations: the head is decapitated from the rest of the body, the mummified erect penis is detached, the clavicles, sternum, and anterior ribcage are all missing, the trunk and limbs are separated from each other, and there is damage to both of the eye sockets.<sup>50</sup> Much of the trauma was due to the attempt to remove the body from the resinous material which had glued it to the innermost coffin.<sup>51</sup> Evidence of repairs of the postmortem trauma are apparent especially near the cranium and cervical vertebra.<sup>52</sup>

### Mummification Anomalies

Tutankhamun's body displays several atypical mummification practices which have not been found applied to other kings of the New Kingdom.<sup>53</sup> These include the unusual positioning of his arm, the embalmers' incision cut mark, the amount of resin covering the remains, the resin found within the skull, missing elements from the chest area including the ribs, sternum, and clavicles, a lack of a heart, and an erect mummified penis.

The positioning of Tutankhamun's arms is very atypical.<sup>54</sup> The typical positioning of Eighteenth Dynasty kings' arms are flexed at the elbows with the forearms crossed and

reaching towards the neck;<sup>55</sup> however, Tutankhamun's arms are flexed at the elbow with the right forearm laying on the upper part of the abdomen and the right hand cupped and covering the upper left hip.<sup>56</sup> The left arm is also slightly higher than the right and hovering over the lower right ribs and the hand covered the distal ends of the right humerus and the proximal ends of the right ulna and radius.<sup>57</sup> This positioning caused his elbows to jut out away from the body, instead of adhering to it.<sup>58</sup>

The embalmers' incision on the left side of the torso, which transverses from the navel to the anterior superior iliac crest, also does not follow standard Eighteenth Dynasty mummification practices: the cut is much larger than the normal practice.<sup>59</sup> Salima Ikram suggests that the large size and atypical positioning of the cut may have been the result of an inexperienced embalmer and that Tutankhamun may have been away from the Nile Valley at the time of his death.<sup>60</sup> In addition, Tutankhamun's entire body was covered in a massive amount of resinous material, which was another atypical practice.<sup>61</sup> Carter notes that the resin did not cover the head or feet of Tutankhamun's mummy or the innermost coffin, but it was poured liberally over everything else.<sup>62</sup> Resin is also observed in the cranial vault.<sup>63</sup> It is concluded that it was poured into the skull on two different occasions for unknown reasons.<sup>64</sup>

<sup>48</sup> Derry 1927, 111–112.

<sup>49</sup> See footnotes 42 and 43.

<sup>50</sup> Harer 2006; Forbes – Ikram 2007; Harer 2007.

<sup>51</sup> Carter mentions using a chisel on the mummified remains to separate the limbs from the trunk in order to release it from the coffin, see Carter 1927, 62–63, 79.

<sup>52</sup> Leek 1972.

<sup>53</sup> Smith 1912; Harris – Wente 1980; Ikram – Dodson 1989.

<sup>54</sup> Derry 1927.

<sup>55</sup> Smith 1912; Rühli – Ikram – Bickel 2015, 8.

<sup>56</sup> Derry 1927. All of the observations are based on Derry's publication and his notes from the examination which were published by Leek 1972.

<sup>57</sup> Rings and bracelets had adorned each forearm prior to Carter and Derry disarticulating the mummy in order to remove the jewelry Carter 1927, 93.

<sup>58</sup> Ikram 2013, 293.

<sup>59</sup> Reeves 1990; Ikram 2013, 293.

<sup>60</sup> Ikram 2010, 294, Footnote 21.

<sup>61</sup> Ikram 2010; 2013.

<sup>62</sup> Carter 1927, 61.

<sup>63</sup> Harrison – Abdalla 1972, Hawass 2018, 224.

<sup>64</sup> Hawass – Saleem 2016, 100–102.

The missing elements from the chest region appear to have been lost during the initial examination since there is no mention of missing elements in any reports.<sup>65</sup> These elements may have been cut and removed in order to retrieve the amulets and other jewelry which were scattered throughout the linen wrappings. The results of the CT scans show that the missing ends of the ribs were clearly cut by a sharp instrument and conclude that it was a result of Carter's invasive autopsy techniques.<sup>66</sup> Others scholars have suggested the missing elements were stolen between 1925 and the second examination in 1968 by R.G. Harrison because several artifacts also went missing though they had been recorded during Carter's excavation.<sup>67</sup> Another theory suggests that the missing elements were the result of a kick or bite to the chest from an animal which had caused Tutankhamun's death.<sup>68</sup> It is clear that the missing elements were not removed during the mummification and embalming processes since the preservation of the entire royal body was necessary to be preserved to be a receptacle for the *ba* and *ka*.<sup>69</sup> The removal of any body part, except for

the internal organs, was not officially sanctioned.<sup>70</sup>

The CT scans of Tutankhamun's mummy reveal a space in the chest where Tutankhamun's heart should be located.<sup>71</sup> The lack of a heart in a king's mummified body was of great concern for the ancient Egyptians. The heart was considered the epicenter of an individual: intelligence, feelings, and moral aspects resided in the heart, and not the brain.<sup>72</sup> It was also the element that was weighed against the feather of Maat during the initiation process into the cult of Osiris and the afterlife.<sup>73</sup> The ancient Egyptians therefore meticulously preserved the heart *in situ* during the mummification process or would at least have placed a substitute heart amulet or scarab in the body.<sup>74</sup> Tutankhamun had neither his physical heart nor a heart scarab.<sup>75</sup> A pendant scarab made of black resin was suspended on a gold wire and hung from Tutankhamun's funerary mask that may have stood in for the heart.<sup>76</sup>

The final anomaly concerns Tutankhamun's mummified phallus. Derry observed that the

<sup>65</sup> Carter 1927; Derry 1927; Leek 1972. Tutankhamun's heart is also missing, which is highly unusual in Eighteenth Dynasty mummification rituals. The lack of heart and sternum suggests that an intense antemortem trauma caused significant damage to the chest area and resulted in the loss of the bones and organs. Though Harer 2007 posits that the trauma may have been a result of a hippopotamus attack, there would have been other attack marks found on other parts of the body.

<sup>66</sup> Shafik – Selim – el Sheikh – Hawass 2008. Hawass – Saleem 2016, 93 mention that fragments of ribs, clavicles, phalanges, and possibly the penis were recorded in the CT scans as laying in the sand box. However, some of the finger phalanges, sternum, both scapulae, and the pelvic bones are completely missing from Tutankhamun's tomb.

<sup>67</sup> Harrison – Abdalla 1972; Forbes 1998. Further evidence of a possible modern robbery includes the missing skull cap which was placed directly upon the cranium. The skull cap (No.256.4t), was beaded and made from a fine cambric linen, see Carter 1927, 82 for details. The worship of the Aten was initiated

during the reign of Tutankhamun's father, Akhenaten. The majority of the gods were abandoned and only the solar disk, the Aten, was worshiped, especially by the royal court. The skull cap had the early form of the Aten's name and may either have been a memento from Akhenaten's reign or evidence of Tutankhamun's continuing affiliation with Atenism, in the form of an earlier variant the name, even after the return to orthodoxy.

<sup>68</sup> Harer 2011. However, this does not account for the missing artifacts.

<sup>69</sup> Taylor 2001.

<sup>70</sup> Morkot 2010.

<sup>71</sup> Hawass – Shafik – Rühli – Selim – El-Sheikh – Abdel Fatah – Amer – Gaballa – Gamal Eldfin – Egarter – Vigel 2009, fig. 13. However, the authors do not mention the absence of the heart organ at all.

<sup>72</sup> Taylor 2001, 17.

<sup>73</sup> Taylor 2001, 36; Ikram 2003, 23–25.

<sup>74</sup> Hawass - Saleem 2016, 239.

<sup>75</sup> Harer 2011.

<sup>76</sup> Carter 1927; Derry 1927.

phallus was embalmed erect and wrapped independently ‘and then retained in the ithyphallic position by the perineal bandages.’<sup>77</sup> His erect phallus, which was mummified at angle of approximately 90° to the body, is the only known royal mummy preserved in that fashion, though it was broken postmortem.<sup>78</sup> Chthonic gods could be portrayed in a mummified form with an erect phallus which symbolized fecundity and resurrection ability such as Osiris and Min. The myth of Osiris was focused specifically on his ability to be resurrected and to have an offspring, Horus, who was associated with legitimacy and power. It was of great importance, therefore, to the agents who commissioned the mummification and interment processes to ensure that Tutankhamun, a young mortal king at the time of his death, would be identified with the chthonic gods through the physical manipulation of his body.

### **The Manipulation of Tutankhamun’s Body**

The question arises as to why Tutankhamun’s physical remains do not completely follow the typical mummification practices typical in the Eighteenth Dynasty.<sup>79</sup> There are two possible explanations: a) Tutankhamun died in a location outside of the Nile Valley and away from the royal embalmer and embalm-

ing practices or b) as a reaction to the mortuary practices that occurred during the time of Akhenaten. The first explanation suggests that Tutankhamun actively participated in campaigns during his brief reign and may have died in one of them away from Egypt.<sup>80</sup> If Tutankhamun died in a skirmish away from the Nile Valley, the initial mummification processes would have had to be done on site such as the embalming rituals that involved the removal of the internal organs, desiccation of the body, and the copious amounts of resin.<sup>81</sup> These initial practices would have ensured that the king’s mummified corpse would be preserved until he reached Thebes for interment. However this theory would not conform with the normative Egyptian mortuary practices. Evidence from the Theban tomb wall decoration suggests that there were sixteen steps to a proper funeral rituals,<sup>82</sup> which would not have been followed with a foreign death of Tutankhamun.

Others suggest that the anomalous elements observed on the body were intentional manifestations of theological and ideological concepts associated with the restored orthodox funerary rituals.<sup>83</sup> Carter emphatically stresses that Tutankhamun’s mummy and coffins were manufactured to represent and

<sup>77</sup> Derry 1927, 110.

<sup>78</sup> Ikram 2013, 294; Rühli – Ikram 2014.

<sup>79</sup> For a complete review of the mummification practices see Ikram and Dodson 1989; Ikram 2010.

<sup>80</sup> However, Hawass – Gad – Ismail – Khairat – Fathalla – Hasan – Ahmed – Elleithy – Ball – Gaballah – Wasef – Fateen – Amer – Gostner – Selim – Selim – Zink – Pusch 2010 suggest that the CT scans and DNA analysis of Tutankhamun’s body indicate that he suffered from a variety of alignments and diseases which would have made participating in military campaigns, and even walking, difficult. More recent examination of the weaponry and armor found amongst the funerary assemblage in KV 63 suggests that Tutankhamun had utilized them in some form and they were not simply ritualistic

outfits and weapons. See Johnson 2010; Spoor 2018 (March 23).

<sup>81</sup> Ikram – Dodson 1989; Ikram 2010, 2. Carter 1927, 78-79 commented that the linen coverings of the body were glued to the bottom of the innermost coffin due to the copious amount of resins. Hawass 2018, 223 also identified in the CT scans five types of embalming fluid that were poured into the coffin at various times.

<sup>82</sup> Altenmüller 1975; Hayes 2010.

<sup>83</sup> Carter 1927; Ikram 2013, 298. In Atenism, there was no judge or king to rule over the afterlife, a role filled by Osiris in the traditional funerary practices. Instead, the afterlife was just a continuation of life with the king being the most significant contributor to appease the solar disk. See van Dijk 1988, 41 for more information.

symbolize Osiris.<sup>84</sup> Even one of the decorated walls in the burial chamber show Tutankhamun as Osiris and not simply a mummified individual.<sup>85</sup> Salima Ikram further suggests that all of the anomalies observed on the mummified remains were intentionally used to promote the idea that Tutankhamun was in fact the god, Osiris.<sup>86</sup> This designation harkens back to the Old Kingdom concept of the deceased king being directly identified with Osiris as found in the Pyramid Texts.<sup>87</sup> Tutankhamun's body was no longer identified as that of a mortal king, but rather as Osiris in his final interment. The copious amount of resin alluded to Osiris' black skin which are symbols of his fertility and regeneration powers.<sup>88</sup> Tutankhamun's erect phallus could be another indicator of Osiris' rebirth and resurrection abilities.<sup>89</sup> The erect phallus at 90° is a crucial aspect of the Osirian myth since it was at this particular angle at which Osiris was able to postmortem impregnate Isis with Horus, thus securing his heir to the throne. E. Amélineau discovered a cult image of Osiris laying on a bed (JdE 32090) at Abydos near the temple of Osiris which represented the aforementioned Osiris myth.<sup>90</sup> A similar shaped cult image was found amongst Tutankhamun's funerary assemblage. It is identified as an Osiride recumbent figure of Tutankhamun (Carter No. 331a, JdE 60720) that was gifted by the general, Maya (fig. 2), though both of the cultic images lack the erect phallus found on the mummified remains of Tutankhamun. The positioning of Tutankhamun's arms, with his elbows jutting out from lower on his chest, also portrayed his body in



**Fig. 2: Osiride recumbent figure of Tutankhamun** laying on a funeral bier, gifted by the general, Maya (Carter No. 331a; Burton Photo p1051a). Photo reproduce with the permission of the Griffith Institute, Oxford.

a physical form of how Osiris was depicted in artistic representations.<sup>91</sup> Tutankhamun's mummified were intentionally manipulated to 'literally emphasize the divinity of the king and his identification with Osiris.'<sup>92</sup>

<sup>84</sup> Carter 1927, 72.

<sup>85</sup> Ikram 2013, 298.

<sup>86</sup> Ikram 2013, 299–301.

<sup>87</sup> Faulkner 2007. However, Smith 2008, argues that the deceased kings were not identified as Osiris by the New Kingdom but rather as members of his cultic retinue.

<sup>88</sup> Wilkinson 2003, 118–122.

<sup>89</sup> Ikram 2013, 299. Tutankhamun's mummified remains share similarities with 'corn mummies,'

which are funerary objects associated with rebirth and resurrection and which gained popularity beginning in the Third Intermediate Period (1069–664 BCE). See M. C. Centrone 2009 for a monography about ancient Egyptian corn mummies.

<sup>90</sup> Amélineau 1904.

<sup>91</sup> Ikram 2013, 300.

<sup>92</sup> Ikram 2013, 301.



But what purposes would it serve to manipulate Tutankhamun's body into a physical manifestation of Osiris? Carter suggests that it was a traditional Egyptian funerary practice that allowed the Egyptians to gain closer acceptance and approval from Osiris at the time of death.<sup>93</sup> Ikram suggests that it was to safeguard the king's body from mortal to divine during the transition from Atenism to the restoration of orthodoxy.<sup>94</sup> However, an integral part of those explanations is missing: Tutankhamun did not bury himself—that ritual was left to his successor, a courtier named Ay.

### Ay's Path to the Legitimacy

In Egyptian culture, the eldest son of an individual was expected to perform mortuary rituals that would help the deceased parent transform into a blessed ancestor, the *akh*.<sup>95</sup> The mortuary practices overseen by the children of the deceased also became a ritualistic formal transmission of power between generations.<sup>96</sup> In Tutankhamun's situation, there was no son, let alone any child, to perform the specific mortuary rituals that would ensure a proper burial for him and the continuation of the Thutmoside line. Instead, Ay, Tutankhamun's vizier and advisor, assumed the duties of the heir by performing the funerary rituals for Tutankhamun. This act ultimately secured the throne for Ay to become the next king.<sup>97</sup>

Ay (ca. 1327-1323 BCE) was one of the most prominent figures in the later part of the

Eighteenth Dynasty. He may have come from the town of *Khent-Min* [Fortress of Min],<sup>98</sup> the modern-day city of Akhmim. Ay's titles are first attested during the early part of Akhenaten's reign and his titles implied a close relationship with Akhenaten and the royal family. His most famous title was that of 'God's Father'; a term that could imply tutor, prince, or father-in-law.<sup>99</sup> He eventually gained the title and position of vizier during the reign of Tutankhamun. At Tutankhamun's death, Ay legitimized his succession to the throne in two ways: by associating himself with Tutankhamun's widow, Ankhesenamun,<sup>100</sup> and by preparing Tutankhamun's burial and funeral.

In Egyptian tradition, when a king died, it was necessary to have a successor ready to take the place as the living king. The deceased king was identified as Osiris, king of the afterlife and the legitimate heir would be identified as Horus, the king of the living, thus continuing the cycle of rulership as founded by the Osiris myth. However, the Osirian mortuary practices were interrupted during the Amarna period. Instead of using the Osirian mythology to assure an afterlife, the Amarna period emphasized the continuation of life, the deceased individuals never left the human sphere.<sup>101</sup> It was a doctrine placed the physical manifestation of the sun god, the so-

<sup>93</sup> Carter 1927, 72.

<sup>94</sup> Ikram 2013, 301.

<sup>95</sup> Harrington 2013, 29.

<sup>96</sup> Kitchen 1995, 333; Dodson 2009, 90. This transfer of power was not only relegated to familial hierarchy but also included official posts.

<sup>97</sup> See van Dijk 1996 for a hypothetical explanation of how Ay became king and Kawai 2010 for a slightly modified version of events.

<sup>98</sup> Faulkner 2002, 194.

<sup>99</sup> Dodson 2009, 95–97. Ay even incorporated this title into his royal cartouche. He may Amenhotep III's brother-in-law (Tiy's brother) and Nefertiti's father. If that is the case, Ay may have been Tutankhamun's maternal grandfather. By marrying

Ankhesenamun, Ay would have firmly claimed the right to the throne.

<sup>100</sup> Dodson 2009; Dodson – Hilton 2010. Ankhesenpaaten, later known as Ankhesenamun, was the third daughter of Akhenaten and Nefertiti. She was a number of years older than her husband, Tutankhamun (née Tutankhaten). Evidence of her marriage to Ay is represented by a glass finger ring that has the prenomen of Ay with the cartouche of Ankhesenamun, implying a marriage between the two. See Dodson 2009, 100–101 for more details. Kawai 2010 claims that Ay simply stressed his relationship with the royal family and did not marry Ankhesenamun.

<sup>101</sup> Smith 2017, 285.

lar disk, at the center of the religion and ignored or outlawed the cults of the rest of the pantheon, especially the cult of Osiris. There was simply not a need for Osiris since the deceased never left the mortal plane. After Tutankhamun ascended to the throne, he continued the process of restoring the cults of the pantheon, which had begun by his predecessor,<sup>102</sup> however he was not able to finish it. Ay inherited a country in the midst of restoring the traditional religious practices. Nowhere is this most clearly seen as in the tomb of Tutankhamun, KV 62, in the Valley of the Kings. The burial chamber walls are decorated with a plethora of gods welcoming Tutankhamun into the afterlife as well as Tutankhamun depicted as Osiris, and Ay, as the heir, performing the important Opening of the Mouth ritual at the interment.<sup>103</sup> But the paintings on the walls were not enough to secure Ay's claims to the throne. He needed the postmortem agency of Tutankhamun to act in his favor, especially in the mortuary sphere. As a result, he commissioned the embalmers to manipulate Tutankhamun's body into a mummified ithyphallic god that represented a variety of chthonic deities, especially Osiris and Min.

In the Egyptian funerary practices, two of the most important cults were that of Osiris and Min. They were both chthonic gods who

shared similar attributes and were depicted in similar forms.<sup>104</sup> Both were fertility and virility gods and both eventually became associated with one another.<sup>105</sup> Osiris had his main cult at Abydos, where evidence of Tutankhamun has been found.<sup>106</sup> Min had several cult centers though the most famous one was at Akhmim. As mentioned previously, Ay may have come from Akhmim, which had produced other influential courtiers of the late Eighteenth Dynasty, including Yuya, who was buried in the Valley of the Kings and was father-in-law to Amenhotep III.<sup>107</sup> Ay even built a temple to Min at Akhmim during his reign.<sup>108</sup> The cult of Min would have then had importance to Ay since Min could be seen as an ancestral god, who could also help his claim to legitimacy. It was necessary then for Ay to stress his connections to the chthonic cults since both could legitimize his right to rule. One of the ways he did it was through the manipulation of Tutankhamun's remains.

The main goal of the deceased Egyptian was to reach the next state of existence called *akh* or 'a glorified departed one, who resides in the grave or the realm of the dead.'<sup>109</sup> It was a state of transformation into an entity who held similar attributes of the gods such as the powers of creation and regeneration. Individuals who were transformed into *akhs* were not

<sup>102</sup> Tutankhamun's restoration of the old state religion is stated on the aptly named Restoration Stela that was usurped by Horemheb. See Bennett 1939 for details.

<sup>103</sup> Dodson 2009, 93–94. The Opening of the Mouth ritual was used to magically awaken a person's (in this case, Tutankhamun's) *ba* and *ka* and allow them the ability to enter the afterlife, see Roth 1992 for details. Reeves 2015 argues that it is Ankhheperure

Neferneferuaten who is shown in a mummified form and Tutankhamun who wears the priest's robes on the north wall of the burial chamber in KV 62.

<sup>104</sup> Wilkinson 2003, 115. Min was often shown in a mummified form with an erect phallus jutting between the linen wrappings. He was also depicted with black skin similar to Osiris.

<sup>105</sup> Gundlach 1982.

<sup>106</sup> Amélineau 1904, 348–350; Effland – Effland 2013, 30–32.

<sup>107</sup> Davis 2000.

<sup>108</sup> Davis 200, 103–104. Ay constructed a variety of temples and buildings throughout Egypt. He not only built the temple at Akhmim, but also continued to work on many of Tutankhamun's unfinished construction projects, including his Temple of Millions of Years near Malqata (see Dodson 2009, 100) and a Sphinx alley that connected Pylon X to the Mut precinct at Karnak Temple. See Eaton-Krauss and Murnane 1991 for more information.

<sup>109</sup> te Velde 1990, 93.

the full equals of the gods, but beings who enjoyed similar advantages as them such as eternal life and the ability to influence other beings both living and dead.<sup>110</sup> To transform into an *akh* required the specific spells and funerary rituals associated with the embalming and mummification practices. Through these processes, the body was transformed from a mortal container into a sacred image. The body was not preserved simply to be lifelike and recognizable by the spiritual elements in the afterlife, but rather as a sacred image, a ‘magical mimesis’.<sup>111</sup> Tutankhamun’s unusual mummification would then have been an intentional manipulation by the embalmers, overseen by Ay, to ensure that it represented the divine image, a statue of the chthonic gods, Osiris and Min.

Tutankhamun’s transformation into an *akh* allowed him to interact with the gods on the behalf of the living heir, Ay. Tutankhamun’s transformed mummified body into the sacred image of the chthonic gods served two purposes. First, it represented the restoration of the funerary cults that had been neglected by royalty and the elites during the Amarna period. Second, it helped in the legitimacy of his successor, Ay. It helped to serve as part of the Osiris myth showing the continuation of the cycle of ruling with the body being a sacred image of Osiris and Ay being living Horus.<sup>112</sup> It represented that the royal succession pattern via Osiris and Horus was restored by the death of Tutankhamun.

Tutankhamun's body is a secondary/effective/non-sentient agent who still could affect

society, especially in regard to Ay's claims of legitimacy. This postmortem agency is exemplified by the transformation powers of the mummification process which caused Tutankhamun to become an *akh* and interact with the gods on the behalf of the living. In order to solidify his claim to the throne, Ay needed to ensure that *all* of the gods saw that he was fulfilling his role as the rightful heir by preparing and overseeing the construction of his predecessor’s funerary rituals. Tutankhamun’s body represented the chance for Ay to not only honor Osiris, but also for him to honor Min and his ancestral roots. Ay started the veneration of his local god in addition to the national gods which allowed him to gain legitimacy to throne. This tact then set a precedent for later kings to follow.<sup>113</sup>

### Conclusions

Death does not bring a loss of agency to an individual, rather it is transformed into a new form that has the ability to affect the living, either directly or indirectly. Tutankhamun’s body became an object during the mummification process. The anomalies found in the mummification of Tutankhamun indicate an intentional manipulation of his body to transform it into a sacred image that represented chthonic gods. The manipulation occurred for two reasons. The first was to show the restoration of the traditional mortuary cults and practices. The second was to legitimize Ay’s succession to the throne. In addition to proclaiming to the living his legitimacy to rule, Ay also had proclaimed his legitimacy to rule

<sup>110</sup> Taylor 2001, 31–30.

<sup>111</sup> Riggs 2014, 89.

<sup>112</sup> It is of interest that there are no divine figures of Osiris or Min found amongst Tutankhamun’s funerary assemblage. The divine figures are wooden figures referred as the ‘divine ennead of the netherworld’ and were wrapped in linen clothes, similar to the linen wrappings of Tutankhamun’s mummified remains, see Reeves 1990, 130-131. It is possible

that Tutankhamun’s remains represents the missing gods, especially Osiris, from the ennead.

<sup>113</sup> Dodson 2009, 112. Horemheb (ca. 1323-1295 BCE) was initially a general under Tutankhamun who eventually proclaimed himself king after Ay’s death. In his coronation inscription, Horemheb honored the god, Horus of *Hnes*, a town from Middle Egypt, who had given him the divine right to ascend to the throne, see Baines 1995, 29.

to the gods, themselves, through the mortuary sphere.

Tutankhamun's body was intentionally manipulated into a statue that depicted multiple divine identities to help with Ay's legitimization as king. The ancient Egyptians believed that the body and its various spirits had direct access to the gods and could affect the lives of living. By actively manipulating Tutankhamun's body into a form that represented a plethora of gods, Ay was not only appeasing the gods and paying homage to the return to traditional religious practices, he was also asserting and legitimizing his succession to the

throne. Tutankhamun's postmortem agency was a vital key in moving further away from the tumultuous Amarna period and securing Ay's claim to the throne.

### **Acknowledgements**

I would like to acknowledge Dr. J. Watson, Dr. M. Ownby, Dr. L. Fogelin, Dr. G. Christopherson, and Dr. R. Mittelman for their help and guidance. I would also like to thank the reviewers, Dr. J. Budka and Dr. S. Töpfer, for their comments and critiques.

## Bibliography

- Altenmüller 1975  
H. Altenmüller, Bestattungsritual, in: W. Helck – E. Otto (eds.), *Lexikon der Ägyptologie*, Vol. 1 (Wiesbaden 1975), 746–765
- Amélineau 1904  
E. Amélineau, *Les Nouvelles Fouilles D’Abydos 1897-1898* (Paris 1904)
- Arnold 2014  
B. Arnold, Life After Life: Bioarchaeology and Post-Mortem Agency, *Cambridge Archaeological Journal* 24, 2014, 523–539
- Baines 1995  
J. Baines, Kingship, Definition of Culture, and Legitimization, in: D. O’Connor-D.P. Silverman (eds.), *Ancient Egyptian Kingship* (Leiden 1995), 3–48
- Bennett 1939  
J. Bennett, The Restoration Inscription of Tut’ankhamun, *The Journal of Egyptian Archaeology* 25, 1939, 8–15
- Bourdieu 1977  
P. Bourdieu, *Outline of a Theory of Practice*, (Cambridge 1977)
- Carter 1927  
H. Carter, *The Tomb of Tutankhamun, Vol. 2: The Burial Chamber* (London 1927)
- Carter – Mace 1923  
H. Carter – A.C. Mace, *The Tomb of Tutankhamun. Vol. 1: Search, Discovery, and Clearance of the Antechamber* (London 1923)
- Centrone 2009  
M. C. Centrone, *Egyptian Corn Mummies: A Class of Religious Artefacts Catalogued and Systematically Analysed* (Saarbrücken 2009)
- Chapman – Kinnes – Randsborg 1981  
R.W. Chapman – I.A. Kinnes – K. Randsborg (eds.), *The Archaeology of Death* (Cambridge 1981)
- Charlier – Khung-Savatovsky – Huynh-Charlier 2012  
P. Charlier – S. Khung-Savatovsky – I. Huynh-Charlier, Forensic and Pathology Remarks Concerning the Mummified Fetuses of King Tutankhamun, *American Journal of Roentgenology* 198, 2012, W629
- Crandall – Martin 2014  
J.L. Crandall – D. L. Martin, The Bioarchaeology of Postmortem Agency: Integrating Archaeological Theory with Human Skeletal Remains, *Cambridge Archaeological Journal* 24, 2014, 429–435
- Davis 2000  
T.M. Davis (ed.), *The Tomb of Iouiya and Touiyou with the Funeral Papyrus of Iouiya*, (London 2000)
- Derry 1927  
M.B. Derry, Appendix I: Report upon the Examination of Tut-ankh-Amen’s Mummy, in: H. Carter, *The Tomb of Tutankhamun, Vol. 2: The Burial Chamber* (London 1927) 101–113
- van Dijk 1988  
J. van Dijk, The Development of the Memphite Necropolis in the Post-Amarna Period, in: A. Zivie, *Memphis et ses Necropoles au Nouvel Empire: Nouvelles données, Nouvelles Questions* (Paris 1988), 37–46

- van Dijk 1996  
J. van Dijk, Horemheb and the Struggle for the Throne of Tutankhamun, *Bulletin of the Australian Centre for Egyptology* 7, 1996, 29–42
- Dobres – Robb 2000  
M.A. Dobres – J.E. Robb, *Agency in Archaeology* (New York 2000)
- Dodson 2009  
A. Dodson, *Amarna Sunset: Nefertiti, Tutankhamun, Ay, Horemheb, and the Egyptian Counter Reformation* (Cairo 2009)
- Dodson – Hilton 2010  
A. Dodson – D. Hilton, *The Complete Royal Families of Ancient Egypt* (London 2010)
- Eaton-Krauss – Murnane 1991  
M. Eaton-Krauss – W.J. Murnane, Tutankhamun, Ay, and the Avenue of Sphinxes between Pylon X and the Mut Precinct at Karnak, *Bulletin de la Société d’Égyptologie* 15, 1991, 31–38
- Effland – Effland 2013  
U. Effland – A. Effland, *Abydos: Tor zur ägyptischen Unterwelt* (Darmstadt/Mainz 2013)
- Faulkner 2002  
R. Faulkner, *A Concise Dictionary of Middle Egyptian* (Oxford 2002)
- Faulkner 2007  
R. Faulkner, *The Ancient Egyptian Pyramid Texts* (Stilwell, KS, 2007)
- Forbes 1998  
D.C. Forbes, *Tombs, Treasures, Mummies: Seven Great Discoveries of Egyptian Archaeology* (Sebastopol, CA 1998)
- Forbes – Ikram 2007  
D.C. Forbes – S. Ikram, Tutankhamen’s Missing Ribs, *KMT* 18, 2007, 50–56
- Gell 1998  
A. Gell, *Art and Agency: An Anthropological Theory* (Oxford 1998)
- Giddens 1984  
A. Giddens, *The Constitution of Society: Outline of the Theory of Structuralism* (Berkeley, CA 1984)
- Gundlach 1982  
R. Gundlach, Min, in: W. Helck – E. Otto (eds.), *Lexikon der Ägyptologie*, Vol. 4 (Wiesbaden 1982), 136–140
- Harer 2006  
W. B. Harer, An Explanation of King Tutankhamun’s Death, *Bulletin of Egyptian Museum* 3, 2006, 83–88
- Harer 2007  
W. B. Harer, Chariots, Horses, or Hippos: What Killed Tutankhamun?, *Minerva: The International Review of Ancient Art and Archaeology* 18, 2007, 8–10
- Harer 2011  
W. B. Harer, New Evidence for King Tutankhamun’s Death: His Bizarre Embalming, *The Journal of Egyptian Archaeology* 97, 2011, 228–232
- Harrington 2013  
N. Harrington, *Living with the Dead: Ancestor Worship and Mortuary Ritual in Ancient Egypt* (Oxford 2013)

- Harris – Wente 1980  
J.E. Harris – E.F. Wente, *An X-Ray Atlas of the Royal Mummies* (Chicago 1980)
- Harrison – Abdalla 1972  
R.G. Harrison – A.B. Abdalla, *The Remains of Tutankhamun*, *Antiquity* 46, 1972, 8–14
- Harrison – Connolly – Abdalla 1969  
R.G. Harrison – R.C. Connolly – A. Abdalla, *Kinship of Smenkhkare and Tutankhamun Affirmed by Serological Micromethod*, *Nature* 224, 1969, 325–326
- Harrison – Gray 1973  
R.G. Harrison – J.E. Gray, *Tutankhamun Postmortem*, *The Lancet* 301, 1973, 259
- Hawass 2010  
Z. Hawass, *King Tut's Family Secrets: DNA Evidence Reveals the Truth about the Boy King's Parents and New Clues to his Untimely Death*, *National Geographic* 218, Vol. 3, 2010, 34–59
- Hawass 2013  
Z. Hawass, *Discovering Tutankhamun: From Howard Carter to DNA* (Cairo 2013)
- Hawass 2015  
Z. Hawass, *Tutankhamun: The Discovery of His Family and New Evidence for His Life and Death*, in: R. Jasnow – K.M Cooney, *Joyful in Thebes: Egyptological Studies in Honor of Betsy M. Bryan* (Atlanta 2015) 211–228
- Hawass 2018  
Z. Hawass, *Tutankhamun, Treasures of the Golden Pharaoh, The Centennial Celebration* (New York 2018)
- Hawass – Gad – Ismail – Khairat – Fathalla – Hasan – Ahmed – Elleithy – Ball – Gaballah – Wasef – Fateen – Amer – Gostner – Selim – Selim – Zink – Pusch 2010  
Z. Hawass – Y. Z. Gad – S. Ismail – R. Khairat – D. Fathalla – N. Hasan – A. Ahmed – H. Elleithy – M. Ball – F. Gaballah – S. Wasef – M. Fateen – H. Amer – P. Gostner – A. Selim – A. Selim – A. Zink – C. M. Pusch, *Ancestry and Pathology in King Tutankhamun's Family*, *Journal of the American Medical Association* 303, 2010, 638–647
- Hawass – Saleem 2011  
Z. Hawass – S.N. Saleem, *Mummified Daughters of King Tutankhamun: Archeologic and CT Studies*, *American Journal of Roentgenology*, 197, 2011, W829 – W836
- Hawass – Saleem 2016  
Z. Hawass – S.N. Saleem, *Scanning the Pharaohs: CT Imaging of the New Kingdom Royal Mummies* (Cairo 2016)
- Hawass – Shafik – Rühli – Selim – El-Sheikh – Abdel Fatah – Amer – Gaballa – Gamal Eldfin – Egarter – Vigel 2009  
Z. Hawass – M. Shafik – F. Rühli – A. Selim – I. El-Sheikh – S. Abdel Fatah – H. Amer – F. Gaballa – A. Gamal Eldfin – E. Egarter – Vigel, *Computed Tomographic Evaluation of Pharaoh Tutankhamun, ca. 1300 BC*, *Annales du Service des Antiquités de l'Égypte* 81, 2009, 159–174
- Hays 2010  
H. Hays, *Funerary Rituals (Pharaonic Period)*, in J. Dieleman – W. Wendrich (eds.), *UCLA Encyclopedia of Egyptology*, Los Angeles, 2010, (<http://digital2.library.ucla.edu/view-Item.do?ark=21198/zz001nwz18>, 20.5.2018)
- Hodder 1982  
I. Hodder, *Theoretical Approach: A Reactionary View*, in: I. Shaw (ed.), *Symbolic and Structural Archaeology* (Cambridge 1982), 1–16

- Ikram 2003  
S. Ikram, *Death and Burial in Ancient Egypt* (London 2003)
- Ikram 2010  
S. Ikram, Mummification, in: J. Dieleman – W. Wendrich (eds.) *UCLA Encyclopedia of Egyptology*, Los Angeles, 2010, (<http://digital2.library.ucla.edu/viewItem.do?ark=21198/zz001nwz18>, 20.5.2018)
- Ikram 2013  
S. Ikram, Some Thoughts on the Mummification of King Tutankhamun, *Études et Travaux* 26, 2013, 292–301
- Ikram – Dodson 1989  
S. Ikram – A. Dodson, *The Mummy in Ancient Egypt: Equipping the Dead for Eternity* (New York, 1989)
- Johnson 2010  
W. R. Johnson, Warrior Tut, *Archaeology* 63, 2010, 26–28
- Kawai 2010  
N. Kawai, Ay versus Horemheb: The Political Situation in the Late Eighteenth Dynasty Revisited, *Journal of Egyptian History* 3, 2010, 261–292
- Kitchen 1995  
K. A. Kitchen, *The Third Intermediate Period in Egypt (1100-650 B.C.)* (Warminster 1995)
- Latour 2005  
B. Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford 2005)
- Leek 1972  
F. F. Leek, *The Human Remains from the Tomb of Tutankhamun* (Oxford 1972)
- Morkot 2010  
R. Morkot, Divine of Body: The Remains of Egyptian Kings-Preservation, Reverence, and Memory in a World without Relics, *Past and Present* 206, 2010, 37–55
- O’Shea 1984  
J.M. O’Shea, *Mortuary Variability: An Archaeological Investigation* (Orlando 1984)
- Reeves 1990  
C.N. Reeves, *The Complete Tutankhamun: The King, the Tomb, the Treasure* (London 1990)
- Reeves 2005  
C.N. Reeves, *Akhenaten: Egypt’s False Prophet* (London 2005)
- Reeves 2015  
C.N. Reeves, The Burial of Nefertiti?, in: C.N. Reeves, *Amarna Royal Tombs Project, Valley of the Kings, Occasional Paper No. 1* (Tucson, AZ 2015)
- Riggs 2014  
C. Riggs, *Unwrapping Ancient Egypt* (London 2014)
- Robb 2004  
J. Robb, The Extended Artifact and the Monumental Economy: A Methodology for Material Agency, in: E. DeMarris – C. Gosden – C. Renfrew (eds.) *Re-thinking Materiality: The Engagement of Mind with the Material World* (Cambridge 2004), 131–139
- Roth 1992  
A.M. Roth, The *psš-*kf** and the ‘Opening of the Mouth’ Ceremony: A Ritual of Birth and Rebirth, *The Journal of Egyptian Archaeology* 78, 1992, 113–147



- Rühli – Ikram – Bickel 2015  
F. Rühli – S. Ikram – S. Bickel, *New Ancient Egyptian Human Mummies from the Valley of the Kings, Luxor: Anthropological, Radiological, and Egyptological Investigations*, BioMed Research International 2015, 2015, 1–8
- Rühli – Ikram 2014  
F. Rühli – S. Ikram, *Purported Medical Diagnoses of Pharaoh Tutankhamun, c. 1325 BC*, HOMO-Journal of Comparative Human Biology 65, 2014, 51–63
- Shafik – Selim – el Sheikh – Hawass 2008  
M. Shafik – A. Selim – I. el Sheikh – Z. Hawass, *Computed Tomography of King Tut-Ankh-Amen*, The Ambassadors Online Magazine, 2008, (<http://ambassadors.net/archives/issue23/selectstudy3.htm>., 16.02.2017)
- Shaw 2000  
I. Shaw (ed.) *The Oxford History of Ancient Egypt* (Oxford 2000)
- Smith 1912  
G.E. Smith, *The Royal Mummies* (Paris 1912)
- Smith 2008  
M. Smith, *Osiris and the Deceased* in: J. Dieleman – W. Wendrich (eds.) *UCLA Encyclopedia of Egyptology*, Los Angeles, 2008, (<http://digital2.library.ucla.edu/viewItem.do?ark=21198/zz001nwz18>, 20.5.2018)
- Smith 2017  
M. Smith, *Following Osiris: Perspectives on the Osirian Afterlife from Four Millennia* (Oxford 2017)
- Sofaer 2006  
J.R. Sofaer, *The Body as Material Culture: A Theoretical Osteoarcheology* (Cambridge 2006)
- Spoors 2018  
N. Spoors, *Tutankhamun was a Warrior King and Not a Feeble Boy*, Northampton Academics Claim, Northampton Chronicle & Echo, 23.4.2018
- Taylor 2001  
J.H. Taylor, *Death and the Afterlife in Ancient Egypt* (Chicago 2001)
- Tung 2014  
T.A. Tung, *Agency, ‘Til Death Do Us Part? Inquiring About Agency of Dead Bodies from the Ancient Andes*, Cambridge Archaeological Journal 24, 2014, 437–452
- te Velde 1990  
H. te Velde, *Some Remarks on the Concept of ‘Person’ in the Ancient Egyptian Culture*, in: H.G. Kippenberg – Y.B. Kuiper – A.F. Sanders (eds.), *Concepts of Person in Religion and Thought* (Berlin 1990), 83–102
- Wilkinson 2003  
R.H. Wilkinson, *The Complete Gods and Goddesses of Ancient Egypt* (London 2003)