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ROCK ART AND STATE FORMATION IN ANCIENT EGYPT

by

Luke Trull

A Thesis

Submitted in Partial Fulfillment of the

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Master of Arts

Major: Art History

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Abstract

The process of state formation in Egypt has been variously modeled. Lapidary tableaux from the eastern and western deserts of Egypt have been dated stylistically to the later period of state formation, the Late Predynastic. This thesis provides an overview of select theories on state formation, with particular focus on ancient Egypt. Those theories are then used as a lens, through which three rock art tableaux might be better understood and dated. This thesis will examine specifically the chronological stages of state formation outlined by Anđelković. After dating two other rock art tableaux to the Late Predynastic Period, I assign them to one of Anđelković's five hypothesized stages of Egyptian state formation. I then evaluate whether his description of the Egyptian state at that phase is congruent with the iconography and content within the scenes.

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Chapter 1: Introduction

General Remarks

Ancient Egyptian civilization may be divided broadly into the Predynastic and the Dynastic periods. These divisions correspond approximately to the periods pre- and post-state formation. This thesis will first offer an overview of the theories and reconstructions of state formation relevant both to "pristine states" in general and Egypt in particular. I also provide defining features. This thesis will then relate these theories of state formation to Predynastic rock art scenes dated stylistically to the latter period of state formation, which is the Late Predynastic, in order to explain their iconography and significance as relevant to the theoretical reconstruction of state formation in ancient Egypt. I also attempt to identify defining features of states within the tableaux. This thesis will examine specifically the chronological stages of state formation outlined by Anđelković, which he applied to Gebel Tjauti "Inscription 1." After dating stylistically two other rock art tableaux to the Late Predynastic Period, I assign them to one of Anđelković's five hypothesized stages of Egyptian state formation. I then evaluate whether his

¹ States are identified through the presence of features, which may vary slightly depending on the author, but usually includes the following: monopoly of the means of violence, territoriality, sovereignty or the right to rule, taxation, and bureaucracy. The state is often defined in opposition to a chiefdom from which states are generally thought to have developed.

² A "pristine state" refers to one of the few first states to emerge on the planet which developed their state largely independently of other developing or already-developed societies. Other "pristine states" include China and Mesopotamia. Bard instead uses the term "primary/first generation state" as well as "early state" (Kathryn Bard, "Political Economies of Predynastic Egypt and the Formation of the Early State" *Journal of Archaeological Research* 25, no. 1 (March 2017): 1-36.). Trigger uses the term "early civilization," using the term "state" generally to refer to less evolutionarily advanced societies such as the "Powhatan Polity" that feature kinship as a significant factor in the functioning of the political entity (Bruce Trigger, *Understanding Early Civilizations: A Comparative Study* (Cambridge University Press, 2007), 47). Rome, for example, was not a "pristine state," being influenced by preceding states such as Egypt.

³ See *Lexikon der Ägyptologie* entry on rock art ("Felsbildern")

description of the Egyptian state at that phase is congruent with the iconography and content within the scene.

The criteria for stylistic dating, which have been discovered by various scholars, include the shape and posture of falcons, presence and style of serekhs, the style of human figures, the presence of scorpions as an apparent symbol of elevated social status, the presence of the bovine-head-on-a-stick motif, the presence of writing, boat form, and white crown form. Anđelković differentiates his five stages through the presence of the following factors: the growing wealth gap, the presence of a supreme ruler, competition between polities, bureaucracy, territorial expansion and unity in regard to economy, politics, and the mortuary realm. I attempt to identify the presence of a supreme ruler through the presence of the following: iconography that seems to communicate elevated social status such as the bovine-head-on-a-stick motif, scorpions, serekhs, and human figures that feature hierarchical scale or wield scepters/maces or are accompanied by dogs or wear crowns or are smiting. I identify bureaucracy to be implicit in the presence of writing. Anđelković states that territory of the Egyptian state expanded over his stages, most notably to the Delta, and so I try to identify indicators of that as well such as foreign toponyms.

I will critically examine how closely the rock art correlates with the theories about state formation in Egypt and, when it does not, how that lack of correlation may better inform our understanding of the nature and dating of the formation of the state in Egypt. Contentious issues, which I will discuss, include scenes depicting violence, which may be symbolic or anecdotal, and the nature of the relationships between the various theorized "proto-states" in Upper Egypt, which are hypothesized to have existed during state formation. These relationships might have manifested as either coalition or competition, with the latter being potentially either violent or not.

This thesis will primarily address state formation. Unification as a terminus is widely thought to have been a crucial step in the formation of the geo-political entity of ancient Egypt as known in the Dynastic Period; the pristine Egyptian state, which originated in the Nile Valley of Upper Egypt, is thought to have spread to the North and annexed that area, eventually leading to the unification event that Egyptians of the Dynastic Period would recall as the unification as Upper and Lower Egypt. Within the realm of Ancient Egyptian studies, the study of state formation has been viewed from an anthropological and archaeological perspective, whereas unification has traditionally been studied from a historiographical perspective. By this I mean studying the archaeological remains from settlements from the perspective of anthropology rather than relying on historical sources such as the Narmer Palette and Manetho, respectively (Appendix, Figures 1, 2). Since unification is theorized to have been a part of the process of state formation in its latter stages, it will be included in this thesis but will be viewed from an anthropological and archaeological perspective.

Although state formation might have begun earlier, according to Jiménez-Serrano based on the supposed predecessor to the Dynastic-Era writing system found in Tomb U-j, the process is readily apparent in the material culture of the Nagada IIIA1 (ca. 3250 BC), in Upper Egypt, where we see evidence for a small class of wealthy elite and the formation of an administrative

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⁴ See Lexikon der Ägyptologie entry on Unification ("Vereinigung beider Länder").

⁵ Alejandro Jiménez-Serrano "The Origin of the State and the Unification." in *Egypt at Its Origins 2*, eds., B. Midant-Revnes and Y. Tristant (Leuven; Dudley MA: Peeters, 2008), 1119.

⁶ See *Lexikon der Ägyptologie* entry on cosmetic palettes ("Paletten, Schmink-")

⁷ See E. C. Köhler, "Of Culture Wars and the Clash of Civilizations in Prehistoric Egypt - An Epistemological Analysis," *Egypt and the Levant* 30 (2020).

body that used an early form of hieroglyphic writing (Appendix, Tables 1, 2).8 The development of writing is thought to have been connected inextricably with state formation in Egypt according to scholars such as Anđelković, Maisels, Trigger, Jiménez-Serrano, and Childe. In addition, the systematization of Egyptian art is thought to have been an important part of the state formation process.9 This codification resulted in a standardized canon of composition, styles and scenes for the official royal art and a set of signs of particular forms for the writing system. 10 Prior to the apparent completion of this systematization at the beginning of Dynasty 3,11 other bodies of symbols, signs and art styles existed contemporaneously, which Kemp terms "Preformal"

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⁸ Jiménez-Serrano "Origin," 1119. According to Stan Hendrickx, "The Relative Chronology of the Naqada Culture: Problems and Possibilities" in *Aspects of Early Egypt*, ed. A. J. Spencer (London: British Museum Press, 1996) cited in Günter Dreyer et al., *Umm El-Qaab I: Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse*. (Mainz: Philipp von Zabern, 1998.), 40. See also W. M. Flinders Petrie, "Sequences in prehistoric remains." *Journal of the Royal Anthropological Institute* 29, nos. 3, 4 (1899) whence the relative dating of the Predynastic cultural sequences originated. On the hypothesized development of the writing found in Tomb U-j into the Dynastic-Era writing system, see Ilona Regulski, "The Origin of Writing in Relation to the Emergence of the Egyptian State," in *Egypt at its Origins* 2, eds. B. Midant-Reynes and Y. Tristant with the collaboration of J. Rowland and Stan Hendrickx. (Leuven; Dudley, MA: Peeters, 2008).

⁹ Regulski, "Origin." See also Goldwasser, *From Icon to Metaphor: Studies in the Semiotics of the Hieroglyphs*. (Fribourg, Switzerland: University Press; Göttingen: Vandenhoeck and Ruprecht, 1995).

¹⁰ Regulski, "Origin," 999; Kemp, *Anatomy*, 134. A. J. de Wit, *Enemies of the State: Perceptions of "Otherness" and State Formation in Egypt*, MA Thesis. Leiden University, 2008. See Heinrich Schäfer, *Principles of Egyptian Art* (Oxford: Griffith Institute, 1986) for the rules governing the codified royal art canon in Dynastic times. Styles and proportions did change over time within the Dynastic Era, however: see William Stevenson Smith and William Kelly Simpson, *The Art and Architecture of Ancient Egypt* (New Haven: Yale University Press, 1998) and Gay Robins, *Proportion and Style in Ancient Egyptian Art* (Austin: University of Texas Press; London: Thames and Hudson, 1994).

¹¹ Jochem Kahl, *Das System der ägyptischen Hieroglyphenschrift in der 0-3 Dynastie* (Wiesbaden: Harrassowitz, 1994), 161-163 in Regulski, "Origin," 999.

culture. 12 After this systematization, some symbols and signs were never seen again or, in some cases, they continued to be represented but their prior meaning was lost. 13

Overview of Rock Art Sites

This thesis will examine three major rock art tableaux, the approximate dates of which fall within the period of state formation. The sites are Gebel Tjauti, Gebel Sheikh Suleiman, and Wadi Nag el-Hamdulab. Each of these sites features images of human figures with attributes or iconography that may signify elevated social status, which may be used to define a state and/or provides visual support for theories detailing how the Egyptian state in particular developed. The scenes at the aforementioned sites provide insight into the political, sociological, and artistic changes occurring in this phase of the Predynastic Period. Relevant images from other rock art sites dated to the period of state formation, of which there are few, are mentioned when their content provides useful comparanda or ancillary evidence for material from my primary corpus.¹⁴

¹² Barry Kemp, *Ancient Egypt. Anatomy of a Civilization*. (London; New York: Routledge, 2006), 113 in Regulski, "Origin," 998. For the difference between symbols and signs, and also a discussion on the relation of both to the codification of Egyptian writing and art, see Orly Goldwasser, *From Icon to Metaphor*.

¹³ Regulski, "Origin," 998. For example, the elephant-treading-on-mountains motif and the scorpion, which were possibly symbols of political power or specific names of rulers or places, were never used to signify any of those hypothesized concepts again. For the elephant-treading-on-mountains motif, see Gebel Tjauti "Inscription 28," and the Coptos Colossi. See Lucas Baqué-Manzano, "Further Arguments on the Coptos Colossi," *Bulletin de l'institut Français d'Archéologie Orientale* (2002) and B. B. Williams, "Narmer and the Coptos Colossi," *JARCE* 25 (1988).

¹⁴ Those sites include Gebel Sheikh Suleiman, Gebel Tjauti, Wadi of the Horus Qa'a, Wadi Nag el-Birka, el-Khawy, Wadi Ameyra, Wadi Mahamid, Wadi Qash, Wadi Abu Subeira, and Wadi Magar.

Previous Scholarship

The study of rock art in Egypt from the period of state formation began during the nineteenth century and received sporadic attention during the twentieth century but has undergone a relative upsurge in scholarship and field work in the last twenty years. Sayce made records of the rupestrian, or rock art, site of Nag el-Hamdulab, which was published by de Morgan et al. in 1894.¹⁵ Hans Winkler's *Rock Drawings of Southern Upper Egypt* in two volumes published in 1938 and 1939 included photographs and analysis of rock art confined to southern/Upper Egypt and spanning the Predynastic to the period after the Muslim conquest. Arkell in 1950 was the first to extensively analyze Gebel Sheikh Suleiman. ¹⁶ Somaglino and Tallet contributed a new interpretation and *in situ* reading of the Gebel Sheikh Suleiman tableau in 2015. ¹⁷ Murnane also provided, in 1987, an analysis of that site. ¹⁸ Bruce Williams has published on the Gebel Sheikh Suleiman scene as well. ¹⁹ Needler in 1967 discovered the scorpion relief at Gebel Sheikh Suleiman and also provided an analysis of it. ²⁰ Dieter Johannes, of the Deutsches Archäologisches Institut, made photographs of the site of Nag el-Hamdulab in

¹⁵ J. de Morgan, U. Bouriant, G. Legrain, G. Jéquier, and A. Barsanti, Catalogue des monuments et inscriptions de l'Égypte antique. Première série. Haute Égypte, tome premièr: De la frontière de Nubie à Kom Ombos (Vienna: Adolph Holzhausen, 1894), 203.

¹⁶ A. J. Arkell, "Varia Sudanica," *Journal of Egyptian Archeology* 36 (1950), relevant pages: 27-30.

¹⁷ Somaglino and Tallet, "Gebel Sheikh Suleiman: A First Dynasty Relief After All..." Archéo-Nil 25 (2015).

¹⁸ W. J. Murnane, "The Gebel Sheikh Suleiman Monument: Epigraphic Remarks" Appendix C in "The Metropolitan Museum Knife Handle and Aspects of Pharaonic Imagery before Narmer," by Bruce Beyer Williams and T. J. Logan, *JNES* 46, no. 4 (1987).

¹⁹ Bruce Beyer Williams, Cornelia Kleinitz, Nadeya Reshetnikova, and Ole Unhammer, "The Gebel Sheikh Suleiman Monument." Self-Published. 2017.

²⁰ Winifred Needler, "A Rock-Drawing on Gebel Sheikh Suliman (near Wadi Halfa) showing a Scorpion and Human Figures." *Journal of the American Research Center in Egypt* 6 (1967).

the 1960s or 1970s which was not rediscovered until 2008 by Gatto and Storemyr based on information provided by Sayce whose original discovery of the site was published in 1894 but only included rough sketches of the scene.²¹

The ongoing Theban Desert Road survey conducted by John Darnell now for over thirty years has provided significant additions to the corpus as well as analysis of the scenes by Darnell, Stan Hendrickx, and Renée Friedman. These three authors have also contributed significantly to analysis of rock art from the period of state formation at other sites through numerous articles. ²² Judd's monograph on rock art of the Eastern Desert focuses on scenes that have been dated to the Predynastic Period, and provides important interpretations in regard to the iconography of elevated social status on human. ²³

The topic of state formation in Egypt has also experienced a renaissance in the last few decades. And elković most recently provides a detailed analysis of the state formation process in Egypt as a whole, dividing the process into stages. ²⁴ Kemp's *Ancient Egypt: Anatomy of a Civilization*, first published in 1989, contributes his "game theory." Trigger's *Understanding*

²¹ Stan Hendrickx and Maria Carmela Gatto, "A Rediscovered Late Predynastic - Early Dynastic royal scene from Gharb Aswan (Upper Egypt)" *Sahara* 20 (2009). Per Storemyr, "A Prehistoric geometric rock art landscape by the First Nile Cataract." *Archéo-Nil* 19 (2009): 126, fig. 8.

²² See for instance, Stan Hendrickx and Renée Friedman, "Gebel Tjauti Rock Inscription 1 and the Relationship between Abydos and Hierakonpolis during the early Naqada III Period," *GM* 196 (2003). and Stan Hendrickx, John Darnell, and Maria Carmela Gatto, "The earliest representations of royal power in Egypt: the rock drawings of Nag el-Hamdulab (Aswan)," *Antiquity* 86 (2012).

²³ Tony Judd, *Rock Art of the Eastern Desert of Egypt: Content, Comparisons, Dating, and Significance* (Oxford: Archaeopress, 2009).

²⁴ Branislav Anđelković, "The Upper Egyptian Commonwealth: A Crucial Phase of the State Formation Process." in *Egypt at its Origins: Studies in Memory of Barbara Adams*, eds. Stan Hendrickx, Renée Friedman, K. Ciałowicz, and M. Chłodnicki (Leuven; Dudley, MA: Peeters. 2004).

²⁵ Barry Kemp, Ancient Egypt: Anatomy of a Civilization (London; New York: Routledge, 2006), 74.

Early Civilizations: A Comparative Study is invaluable as a source for defining states in general and for exploring the idiosyncrasies and evidence from different states around the world in antiquity. ²⁶ Maisels, in his *The Archeology of Politics and Power: Where, When, and Why the First States Formed,* likewise gives an overview of the state formation process in the ancient world, while devoting a chapter to Egypt. ²⁷ Azat Gat has provided the concept of the "rural petty state" which is connected with his concept of "overlordship. ²⁸

Campagno has written articles spanning the last twenty years focusing on topics including kinship and warfare as they may have related to the formation of the pristine Egyptian state. ²⁹ Jiménez-Serrano³⁰ and Alice Stevenson³¹ have also made contributions to the study of the formation of the Egyptian state. Köhler has also examined the topic of ethnicity and culture during this period of the Predynastic, reevaluating the validity of the Nagada Expansion migrationist paradigm. ³² The articles contained within the anthology, *Before the Pyramids: The*

²⁶ Bruce Trigger, *Understanding Early Civilizations: A Comparative Study* (Cambridge; New York: Cambridge University Press, 2007).

²⁷ Charles Maisels, *The Archeology of Politics and Power: Where, When, and Why the First States Formed* (Oxford; Philadelphia: Oxbow, 2010).

²⁸ Azar Gat, "Rural Petty-State and Overlordship: Missing Links in the Evolution of the Early State," *Anthropos* 98 (2003).

²⁹ see for instance, Marcelo Campagno, "In the Beginning was War: Conflict and the Emergence of the Egyptian State." in *Egypt at its Origins: Studies in Memory of Barbara Adams*, eds. Stan Hendrickx, Renée Friedman, K. Ciałowicz, and M. Chłodnicki. (Leuven; Dudley, MA: Peeters, 2004).

³⁰ Alejandro Jiménez-Serrano, "The Origin of the State and the Unification." in *Egypt at Its Origins* 2, eds., B. Midant-Reynes, and Y. Tristant (Leuven; Dudley, MA: Peeters, 2008).

³¹ Alice Stevenson, "The Egyptian Predynastic and State Formation," *Journal of Archaeological Research* 9 (2016).

³² E. Christiana Köhler, "Of Culture Wars and the Clash of Civilizations in Prehistoric Egypt - An Epistemological Analysis," Egypt and the Levant 30 (2020).

Origins of Egyptian Civilization (2011), edited by Emily Teeter, cannot go without mention.

Bestock's Violence and Power in Ancient Egypt: Image and Ideology Before the New Kingdom (2019) is valuable for its chapters on the Predynastic Period. Her second chapter offers early images of subjugation in Nagada I perhaps evincing differences in social status; her third chapter explores the scenes of violence during the period of state formation in the late Predynastic. In addition to the immense corpus of scholarship that Stan Hendrickx has contributed on Late Predynastic and Early Dynastic iconography in general and as relevant to state formation and/or

³³ See *Lexikon der Ägyptologie* entry on *ma'at* and Jan Assmann, *Ma'at: Gerechtigkeit und Unsterblichkeit im Alten Ägypten.* (München: C. H. Beck, 1990).

the emergence of elevated social status,³⁴ Förster,³⁵ Graff,³⁶ Jiménez-Serrano,³⁷ Eyckerman,³⁸ and Raffaele,³⁹ have also made contributions in that regard.

Lastly, the discovery of Tomb U-j and subsequent analysis by Günter Dreyer was of paramount importance for the evidence it provided for the development of writing in Egypt. ⁴⁰ His, as well as Kahl's, ⁴¹ analysis of the tags, in particular, have provided crucial theories for understanding the development of writing as it relates to the emergence of the pristine state in

³⁴ See, for instance, Stan Hendrickx, "The dog, *Lycaon pictus* and order over chaos in Predynastic Egypt," in *Archaeology of Early Northeastern Africa. In Memory of Lech Krzyżaniak, eds.* K Kroeper, M Chłodnicki, and M Kobusiewicz (Poznań: Poznań Archaeological Museum 2006) and Stan Hendrickx, "Hunting and Social Complexity in Predynastic Egypt," *Bulletin des Séances de l'Académie Royale des Sciences d'Outre-Mer* 57, nos. 2-4: (2011).

³⁵ Stan Hendrickx and Frank Förster, "Violence and the Early Egyptian State," *Egypt and the Levant* 30 (2020). And Stan Hendrickx and Frank Förster, "Early Dynastic Art and Iconography," chapter 37 in *A Companion to Ancient Egypt Vol II*, ed. Alan B Lloyd (Wiley-Blackwell, 2010).

³⁶ Gwenola Graff, Merel Eyckerman, and Stan Hendrickx, "Architectural Elements on Decorated Pottery and the Ritual Presentation of Desert Animals." in *Egypt at Its Origins 3*, eds., Renée Friedman, and P. N. Fiske (Leuven; Paris; Walpole, MA: Peeters, 2011).

³⁷ See, for instance, Alejandro Jiménez-Serrano, "Elephants Standing on Hills or the Oldest Name of Elephantine?" in *Egypt at its Origins: Studies in Memory of Barbara Adams*, eds., Stan Hendrickx, Renée Friedman, K. Cialowicz, and M. Chłodnicki (Leuven; Dudley, MA: Peeters, 2004). and Alejandro Jiménez-Serrano, "Chronology and Local Traditions: The Representation of Power and the Royal Name in the Late Predynastic Period," *Archaéo-Nil* 13 (2003). And Alejandro Jiménez-Serrano, "Horus Ka and the Cemetery of Helwan" *Göttinger Miszellen* 180 (2001).

³⁸ See for instance, Stan Hendrickx and Merel Eyckerman, "Visual Representation and State Development in Egypt," *Archaéo-Nil* 22 (Jan. 2012). and Stan Hendrickx and Merel Eyckerman, "Continuity and change in the visual representations of Predynastic Egypt" in *Recent discoveries and latest research in Egyptology. Proceedings of the First Neapolitan Congress of Egyptology. Naples, June 18th-20th 2008, eds., Francesco Raffaele, M. Nuzzolo and I. Incordino (Wiesbaden: Harrassowitz, 2010).*

³⁹ F. Raffaele, "Animal Rows and Ceremonial Processions in Late Predynastic Egypt," In *Recent Discoveries and Latest Researches in Egyptology: Proceedings of the First Neapolitan Congress of Egyptology*, eds. F. Raffaele, M. Nuzzolo, and I. Incordino (Wiesbaden: Harrassowitz, 2010).

⁴⁰ Günter Dreyer et al., *Umm el-Qaab I: Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse* (Mainz: Philipp von Zabern, 1998).

⁴¹ Kahl, Jochem, "Die frühen Schriftzeugnisse aus dem Grab U-j in Umm el-Qaab" *Chronique d'Egypte* 78 (2003).

Egypt. The work of Regulski in analyzing this earliest known writing in the Predynastic Period based not only on the tags from Tomb U-j but also potmarks from the same tomb has proven to be of equally high value in the same regard.⁴²

Itinerary

In Chapter 2, I provide a definition of state formation and an overview of scholarly approaches to reconstructing the process by which the state formed. Chapter 3 provides a discussion and analysis of the primary corpus of five rock art sites, outlined above, as they relate to the process of state formation. In this regard, it is important to note that the rock art scenes discussed in Chapter 3 have been dated on the basis of formal criteria, which is to say, through stylistic affinities with dated artwork from other sites, since there are no organic materials tied firmly to those scenes that could be dated absolutely with Carbon-14 or similar methods. The attributed dates for the rock art scenes discussed in Chapter 3 follow Darnell, ⁴³ Jiménez-Serrano⁴⁴ and Huyge. ⁴⁵ Finally, in Chapter 4, I provide my concluding remarks and suggestions for further avenues of research.

⁴² Regulski, "Origin."

⁴³ based on E. C. M. van den Brink, "Incised Serekh Signs Part I" Kaiser and Dreyer (1982) and/or the work of Stan Hendrickx on Predynastic iconography. See E. C. M. van den Brink, "The incised serekh signs of Dynasties 0–1, Part I: Complete vessels" in Aspects of Early Egypt, edited by J. Spencer (London: Occasional Papers of the British Museum, 1996) and E. C. M. van den Brink, "The Pottery-Incised Serekh-Signs of Dynasties 0-1 Part II: Fragments and Additional Complete Vessels," *Archaéo-Nil* 11 (2001). and Werner Kaiser and Günter Dreyer, "Umm el-Qaab: Nachuntersuchungen im frühzeitlichen Königsfriedhof 2. Vorbericht," *MDAIK* 38 (1982).

⁴⁴ Jiménez-Serrano, "Chronology and Local Traditions."

⁴⁵ Dirk Huyge, "The Painted Tomb, rock art and the recycling of Predynastic Egyptian imagery," *Archéo-Nil* 24 (2014).

Chapter 2: Theoretical Discussion and Literature Review

Defining a State

The topic of state formation as relevant to ancient Egypt will now be examined. How, why and when the state formed in Egypt will be part of this examination. The definition of a state itself will first be given. The "pristine state" in Egypt is defined variously but always as having several crucial features. Those features are monopoly on the means of violence, bureaucracy, social stratification, and coercion, the latter of which usually takes the form of taxation. A state is defined by Anđelković through the presence of the following traits: monopoly on the means of violence, territoriality, sovereignty, bureaucracy, authority, legitimacy, citizenship and taxation. Taxation often took the form of grain, but labor could also serve as payment. *Corvée* is a form of taxation in which labor is performed rather than agricultural surplus or being given as payment; military conscription might also be viewed in a similar vein.

Childe, although writing about city-states, enumerated a list of ten traits that can be utilized to distinguish territorial states like Egypt from the Neolithic societies from which they developed: large size; specialized occupations such as craftsmen, priests, and scribes/bureaucrats; farmers whose surplus can be taxed by the elites; monumental architecture; an elite class who does not produce their own food or other basic necessities; writing or other means of recording and storing information; sciences such as astronomy, calendars and

¹ Sovereignty may be understood as the "right to rule" supremely and absolutely. See also Kemp, *Anatomy*, (2nd ed.) 74.

² See John Baines and Norman Yoffee, "Order, Legitimacy and Wealth: Setting the Terms," in *Order, Legitimacy, and Wealth in Ancient States*, eds. Janet Richards and Mary van Buren (Cambridge University Press, 2005).

³ Anđelković, "Commonwealth," 535.

⁴ See Trigger, Early Civilizations, 47.

accounting; fine art; importation of foreign materials; a societal organization that is made stable through the maintenance of social cohesion and quelling of rebellion through religion and physical force or the threat thereof, respectively.⁵ Trigger sees the primary difference between a "civilization" and chiefdoms, the type of society out of which states are generally thought to develop, as being the primacy of social rank as the organizing force of society rather than kinship.⁶

Agriculture is not always listed as a defining trait of a civilization, but the food surplus it makes possible may catalyze the formation of social hierarchy, leading to an elite class. Maisels has stated that where an agricultural food surplus exists and there is a way to systematically exploit others through an ideology legitimizing that exploitation via rank/status differences, a state will form due to the inherent human desire to procure something for nothing, which he terms "negative reciprocity." Kemp opines that the emergence of the state was catalyzed by settled agriculture, because the surplus of agriculture sustained the large population from which taxes could be acquired, while a sedentary lifestyle led to a sense of a right to the land on which one lived. Trigger also places importance on intensive food production via agriculture and asserts that agricultural surplus is a key feature of a state.

According to Jiménez-Serrano, the main diagnostic feature of a state is the presence of bureaucracy that functions as a mediator between the non-elites and the ruler, thereby

⁵ V. G. Childe, "The Urban Revolution," *Town Planning Review* 21 (1950).

⁶ Trigger, Early Civilizations, 44.

⁷ Maisels, *Politics and Power*, 352.

⁸ Kemp, *Anatomy*, (2nd ed.) 74.

⁹ Trigger, Early Civilizations, 313.

eliminating direct intimate dealings.¹⁰ Jiménez-Serrano states that the bureaucracy is an innovation created to cope with the management of the ruler's territory, especially their income from taxes.¹¹ Trigger posits that bureaucracy supplants the patron-client dynamic of earlier forms of societal organization.¹² Trigger states that the bureaucracy provides a mechanism for focusing power (and wealth) in the political, religious and economic dimensions via the palace and the temple.¹³ Campagno states that bureaucracy reinforces the social hierarchy and is essentially the arm of the ruler, acting on his behalf to procure taxes, organize monumental works, and generally extract labor and goods from the non-elites.¹⁴ Writing is thought to be the main coercive tool of most bureaucracies and implies a bureaucracy's existence according to Jiménez-Serrano.¹⁵

¹⁰ Jiménez-Serrano, "Origin," 1121.

¹¹ Jiménez-Serrano, "Origin," 1121.

¹² Trigger, Early Civilizations, 47.

¹³ Jiménez-Serrano, "Origin," 1121.

¹⁴ Campagno, "Coercion, Creation, Intervention."

¹⁵ Jiménez-Serrano, "Origin," 1127. The evidence points to the presence of a precursor to true writing. Tomb U-j is dated to the Nagada IIIa2 Period according to Kaiser's chronology or, alternatively, Nagada IIIA1 in Hendrickx's chronology (both cited in Günter Dreyer et al., Umm El-Qaab I: Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse. Deutsches Archäologisches Institut, Abteilung Kairo, Archäologische Veröffentlichungen 86. (Mainz: Philipp von Zabern, 1998), 40.) Tomb U-j is located in Umm el-Qaab and provides the earliest known evidence for writing in Egypt in the form of symbols carved on ivory and bone dockets attached to vessels. This system of symbols seems to have been the ancestor to the codified hieroglyphic writing system found in Egypt during the Dynastic Period according to Regulski (Ilona Regulski, "The Origin of Writing in relation to the emergence of the Egyptian State." in Egypt at its Origins 2, eds., B. Midant-Reynes and Y. Tristant (Leuven; Dudley, MA: Peeters, 2008), 997). The rebus principle, phonograms, genitives, or consistent syntax of any kind has not been proven to have been part of the Tomb U-j symbols, so it cannot be considered a fully formed writing system (Regulski "Origin," 988). Potmarks from the same period, some being found in Tomb U-j, are not ancestral to the Dynastic writing system nor are they considered true writing, and decorated seals in Egypt are not thought to have represented speech (Regulski "Origin," 992; see Patricia Podzorski, "Predynastic Egyptian Seals of Known Provenience in the R. H. Lowie Museum of Anthropology," JNES 47, no. 4 (1988), 261, fig. 2 cited in Regulski "Origin," 992). In Tomb U-i perhaps origin designations (Dreyer "Umm el-Qaab" in Kahl Jochem "Die frühen

Campagno cites coercion as a key, defining feature of a state, inextricably connected to the monopoly on violence. ¹⁶ Trigger sees taxes, which would have been in the form of grain or *corvée* labor, as equally important for the maintenance of the state in regard to caloric needs of the small elite population who do not, by definition, produce their own food. ¹⁷

Writing systems are invented by complex and large polities in order to manage themselves. Writing suggests bureaucracy which is one of the diagnostic characteristics of a state. If it is important to note that writing cannot be a requirement for a polity to be considered a state; writing can only imply bureaucracy. For example, the Inca Empire, considered a state, did not practice writing, per se, but did have an information-recording system used by their bureaucracy in the *khipu*. The writing system is posited by Kemp to have been codified in a deliberate act, which occurred simultaneously with the codification of royal art.

Schriftzeugnisse aus dem Grab U-j in Umm el-Qaab" *Chronique d'Egypte* 78 (2003), 117) are listed on tags beside what are perhaps toponyms such as Elephantine, Nubia and Hierakonpolis (Jiménez-Serrano "Origin," 1129) or plantations belonging to eponymous local rulers, i.e. "plantation of ruler named Elephant" (Dreyer et al., *Umm el-Qaab I*, in Kahl, "Schriftzeugnisse," 117). These goods may have been acquired via trade, voluntary tribute or taxes.

¹⁶ Campagno, "Coercion, Creation, Intervention."

¹⁷ Trigger, Early Civilizations, 313.

¹⁸ Jiménez-Serrano, "Origin," 1133.

¹⁹ Anđelković, "Commonwealth," 535.

²⁰ Trigger, Early Civilizations, 56, 595.

²¹ Kemp, *Anatomy*, (2nd ed.), 134 in Regulski, "Origin", 999.

²² Regulski, "Origin," 999.

Stages of State Formation in General

Before we examine the stages of state development as variously reconstructed for Egypt, it may be beneficial to proceed first with a brief summary of two of the most valuable general models of the state formation process describing societal development in the wider ancient world. Maisels created a stepwise model outlining the possible stages in the formation of the "pristine state," derived from the combined analysis of "pristine states" across the globe. 23 Maisels' first step is the appearance of egalitarian communities practicing agriculture wherein some lineages grow more prosperous and seek to maintain their position by perhaps offering feasts and legitimizing their status through religion. Subsequently, an elite class forms, which uses physical force on the subordinates of its own group and any outgroups when advantageous. The members of this elite class do not typically marry outside their own class according to Maisels' model. Finally, an exceptional individual, whom Maisels terms a "charismatic," emerges who acquires a social status above that of the other elites. 24

The second general model of state formation is that put forth by Gat. Gat provides a flow chart model showing the three possible paths a chiefdom might take to reach statehood (Appendix, Figure 4).²⁵ The difference between the three pathways is the presence or absence of rural petty states or of urban petty states.²⁶ His model differs from those of the other scholars

²³ Maisels, *Politics and Power*, fig. 9.1.

²⁴ Maisels, *Politics and Power*, 349.

²⁵ Gat, "Rural Petty-State," 135-136.

²⁶ Gat, "Rural Petty-State," 135-136.

discussed herein by the inclusion of reverse arrows signifying that the development of society can also go backwards, regressing to a chiefdom.²⁷

General Overview of State Formation in Egypt

An overview of how the state in Egypt is generally thought to have developed according to current Egyptological theory will now follow. To begin with, inhabitants of Nabta Playa fled the aridifying environment for the Nile Valley and brought their culture, which consisted of astronomy and probably bovine worship. ²⁸ Farming communities form along the Nile utilizing African domesticates such as cattle and sorghum as well as those imported from the Fertile Crescent such as goats, emmer and barley. ²⁹ Evidence of social inequality appeared soon after agricultural surplus was available in the Badarian Period (Appendix, Table 4). ³⁰ Tombs from Nag ed-Der dated to Nagada I perhaps show six "descent groups" or families of differing wealth. ³¹ According to Kemp, a population living in one place for the purpose of practicing agriculture may develop a sense of territoriality which might then develop into a sense of

²⁷ Gat, "Rural Petty-State," 135-136.

²⁸ See Fred Wendorf and Romauld Schild, "Nabta Playa and Its Role in Northeastern African Prehistory." *Journal of Anthropological Archaeology* 17 (1998).

²⁹ See Michael Brass, "Early North African Cattle Domestication and Its Ecological Setting: A Reassessment" *Journal of World Prehistory* 31 (2018). and Fred Wendorf and Romauld Schild, "Nabta Playa and Its Role in Northeastern African Prehistory." *Journal of Anthropological Archaeology* 17 (1998).

³⁰ Maisels, *Politics and Power*, 141. W. Anderson, "Badarian Burials: Evidence for Social Inequality in Middle Egypt during the Early Predynastic Era." *JARCE* 29 (1992), 61 in Maisels, *Politics and Power*, 141.

³¹ Stephen Savage, "Descent Group Competition and Economic Strategies in Predynastic Egypt," *Journal of Anthropological Archaeology* 16 (1997) and Stephen Savage, "Some Recent Trends in the Archaeology of Predynastic Egypt" *Journal of Archaeological Research* 9, no. 2 (2001), 125, 126 in Maisels, *Politics and Power*, 156.

"sovereignty."³² Park's model, which incorporates Chaos Theory, shows perhaps how social hierarchy emerged in Egypt to ensure only families of higher social status had access to the best land after the Nile flood receded for the agricultural society. ³³ Park's model considers the inconsistent geographic extent of the fertility brought by the Nile flood as an impetus for the development of social hierarchy. ³⁴ Evidence for Park's model may be found in the "descent groups" interpreted in the graves from Nag ed-Der mentioned previously.

The archaeological evidence suggests that the state emerged in Upper Egypt and spread to Lower Egypt.³⁵ There emerged three major centers in the Nile Valley of Upper Egypt in the Nagada I Period: Abydos in the northern part, Hierakonpolis in the southern part, and Nagada located in between. A "tube effect,"³⁶ caused by the linear geography of Upper Egypt in contrast to the Delta, made the existence of buffer zones between "proto-states" relatively scarce which in turn made contact with others living on or near the alluvium relatively easy. Ancient Egypt was a territorial village state, not a collection of city-states.³⁷ What this means specifically is that there

³² Kemp, *Anatomy*, (2nd ed.) 74.

³³ Maisels, *Politics and Power*, 155. See T. K. Park, "Early trends toward class stratification. Chaos, common property, and flood recession agriculture." *American Anthropologist* 94 (1992), cited in Maisels: Examining another case of a culture living with flood-recession agriculture, in that case on the Senegal River, Park noticed that the inconsistent nature of the floods led to inequality and thus hierarchy from the beginning of that society as the land fertilized and irrigated by the flood could only serve some of the population.

³⁴ Park, "Flood Recession Agriculture," 106 in Maisels, *Politics and Power*, 155.

³⁵ Currently, all archaeological evidence from the Delta shows lack of political development comparable to Upper Egypt during the period of State Formation. The geology of the Delta was far less conducive to preservation than was the desert of Upper Egypt. The evidence from the Delta is of a domestic character while that of Upper Egypt thought to be contemporaneous is mortuary, preventing direct comparison. See Köhler, E Christiana. "The Development Of Social Complexity In Early Egypt. A View From The Perspective Of The Settlements And Material Culture Of The Nile Valley," Ägypten und Levante 27 (2017), 336-337.

³⁶ Anđelković, "Commonwealth," 538.

³⁷ Maisels, *Politics and Power*, 165. Trigger, *Early Civilizations*, 92, 131-132.

is thought to have existed a small enclave of elite, specialized craftsmen, and bureaucracy centralized within the developing urban centers, while most of the population were farmers dispersed along the Nile floodplain.³⁸ According to the prevailing view, these three polities unified and then spread to the Delta, annexing that area and, finally, creating a unified state consisting of Upper and Lower Egypt under the rule of one supreme monarch.

Egyptian Unification

Ancient Egyptians in the Historic Era conceived of their land as having two parts:

northern/Upper Egypt and southern/Lower Egypt, oriented relative to the south-north flow of the Nile River. Scholars have, therefore, viewed the unification of these two regions as a crucial step in the development of Egypt's state. The political unification of Lower Egypt and Upper Egypt emerged in Dynasty 1 as a result of state formation. However, a state was present at least as early as the Nagada IIIA1 Period (Appendix, Table 1).³⁹ According to Jiménez-Serrano, state formation and unification are two related but separate concepts.⁴⁰ Unification as a *concept* should also be differentiated from unification as a single *event*. Political, cultural and economic unification between Upper and Lower Egypt was a development that is theorized to have occurred over time based on archaeology. Unification as an *event* was a construct formed by the Egyptians later in the legendary figure of Menes to explain the unified nature of the kingdom in which they lived.⁴¹

³⁸ Maisels, *Politics and Power*, 165. Trigger, *Early Civilizations*, 131-132.

³⁹ Jiménez-Serrano, "Origin," 1119.

⁴⁰ Jiménez-Serrano, "Origin," 1120.

⁴¹ Jiménez-Serrano, "Origin," 1120. See *Lexikon der Ägyptologie* entry on "Menes."

The present thesis rejects the earlier view, popularized by Breasted⁴² and based primarily on the Narmer Palette, the Greco-Egyptian historian Manetho, and the Egyptians' written accounts of their own history, that unification was a single event equivalent to state formation, which came about as a result of one major battle.⁴³ This interpretation rested on the assumption that the Narmer Palette and the individual designated as Menes are anecdotal rather than symbolic. Instead, I consider unification from an archaeological/anthropological perspective as it has been viewed as a crucial part of the development of the state in Egypt.

Models of the Stages of State Formation in Egypt

The theoretical models reconstructing the nature of the state's development specific to Egypt will now be examined. There is a multiplicity of reconstructions of the developmental stages of the Egyptian "pristine state." Maisels has modeled the development of the Egyptian state in six steps starting with farming villages and ending in unification of Upper and Lower Egypt (Appendix, Table 7).⁴⁴ Kemp reconstructs the development of the Egyptian state in three steps: Small, egalitarian farming villages evolve out of bands of nomadic hunter-gatherers; next, agricultural towns emerge; finally, "incipient city-states" develop.⁴⁵

Anđelković discerns five major phases in state formation in Egypt: proto-nomes, nome pre-states, the "Upper Egyptian Commonwealth," the "All-Egyptian Early State," and finally the

⁴² Breasted, James Henry, *A History of Egypt from the Earliest Times to the Persian Conquest*. Second ed. (Charles Scribner's Sons, 1909), 36-37.

⁴³ Jiménez-Serrano, "Origin" 1120.

⁴⁴ Maisels, *Politics and Power*, 157-158

⁴⁵ Kemp, *Anatomy*, (2nd ed.) 75.

"Established State" (Appendix, Table 8). 46 Anđelković dates proto-nomes to the Nagada IA-B periods (ca. 4400-3800 BCE). 47 Proto-nomes are thought by Anđelković to be chiefdoms, a type of society that, in the case of these proto-nomes in Egypt, can be described as a "minimal chiefdom." 48 According to this view, the difference between a chiefdom and a state is that the bureaucracy of the former is not yet "internally specialized." 49 What this means is that a chiefdom can organize itself at the local level but is not prepared to do so outside the home territory, 50 such as a trading outpost or colony. These proto-nomes then develop into "nome prestates" dated to the Nagada IC-IIB periods (ca. 3800-3500 BCE) which Anđelković describes as maximal or complex chiefdoms. 51 In the Nagada IIC-D1 periods (ca. 3500-3450 BCE) the so-called "Upper Egyptian Commonwealth" appears, featuring an "asymmetrical confederation" in

⁴⁶ Anđelković, "Commonwealth." Anđelković terms his fifth stage "Egyptian Empire," but this terminology is problematic due to the classification of Egypt during the New Kingdom as an empire by virtue of its colonies in Syria-Palestine and Nubia. Anđelković seems to perhaps be treating the Delta as essentially a colony of the state which is thought by most scholars to have developed in Upper Egypt and spread to the Delta through conquest. However, the spread to the Delta is contained within his previous stage, that of the "All-Egyptian Early State." Because of these contradictions, the term "established state-level society," coined by (D. C. Patch, *The Origin and Early Development of Urbanism in Ancient Egypt: A Regional Study*. (Philadelphia. 1991.), 4) and applied by Anđelković to this stage, will be used in this thesis in the abbreviated form of "Established State" instead of "Egyptian Empire."

⁴⁷ Anđelković, "Commonwealth," 535.

⁴⁸ Andelković, "Commonwealth," 535. Kathryn Bard, "Political Economies," 2-3 has shown that, as chiefdoms can be either largely egalitarian in nature ("group-oriented") or hierarchical ("individualizing"), "chiefdom" is a technically imprecise term to use to describe Upper Egypt at this time which was likely a rank society. Bard cites C. Renfrew, "Beyond a subsistence economy: The evolution of social organization in prehistoric Europe," in *Reconstructing Complex Societies: An Archaeological Colloquium*, ed. C. B. Moore (Bulletin of the American Schools of Oriental Research 20, 1974). Furthermore, as Bard says, citing Marcus, "Peaks and Valleys," 258: Chiefdoms are a type of territorial unit, not a type of society, the Upper Egyptian proto-nomes in Egypt being thought to have represented the latter.

⁴⁹ Kathryn Bard, "Political Economies," 4.

⁵⁰ Kathryn Bard, "Political Economies," 4.

⁵¹ Anđelković, "Commonwealth," 536.

which several independent, or perhaps semi-independent, nome pre-states were linked to the strongest one.⁵² However, it seems likely that this "Commonwealth" would have still exhibited internal competition.⁵³ Replacement of the dominant Lower Egyptian material culture, the so-called Buto-Maadi group, with that of the southern/Upper Egyptian Nagada culture group, occurred during this developmental phase (Appendix, Table 5).⁵⁴

As a result of expansion into the north, we reach the so-called "All-Egyptian Early State" during the Nagada IID2-IIIB/C1 Periods (ca. 3450 - 3150 BCE), which overlaps with the so-called "Dynasty 0."⁵⁵ At this point, we observe evidence for Upper Egyptian political unity in addition to the previously achieved unity, as observed with regard to mortuary culture, economy, and military.⁵⁶ Finally, the "Established State" emerged with the installation of Dynasty 1 by Hor-Aha in the Nagada IIIC1/2 period (ca. 3150-3000 BCE).⁵⁷ There is no apparent, major change in the material culture from this period, although social inequality seems to have grown and the economic, political and social dimensions of the institution became more intricate and larger.⁵⁸ This apparent increase in social inequality as well as growth in size and complexity of

⁵² Anđelković, "Commonwealth," 537.

⁵³ Anđelković, "Commonwealth," 537.

⁵⁴ Anđelković, "Commonwealth," 539.

⁵⁵ Anđelković, "Commonwealth," 541.

⁵⁶ Anđelković, "Commonwealth," 538.

⁵⁷ Anđelković, "Commonwealth," 541.

⁵⁸ Anđelković, "Commonwealth," 541.

the state is perhaps also demonstrated in the noticeable discord in size of the Predynastic tombs at Umm el-Qaab including that of Hor-Aha.⁵⁹

Kinship

Campagno and Trigger see kinship, generally held to be the primary organizing factor of societies classified as chiefdoms, as a limiting factor in the development of a state, which does not, according to them, utilize kinship but rather rank/status to order its people. ⁶⁰ Since coercion, usually in the form of taxes, is a defining aspect of a state, Campagno and Trigger opine that a state is incompatible with kinship functioning as the primary organizing force in the society. ⁶¹ Campagno suggests that the "moral norm of reciprocity" ensures egalitarianism in chiefdoms and prevents coercion, the latter of which defines states. ⁶² However, this notion of egalitarianism existing in any society is highly questionable as there are always sub-groups within societies that have inferior status or strength and are exploitable as a result. Campagno, however, does state that the magnitude and nature of exploitation within a chiefdom is not comparable to that of an outside group. ⁶³

According to Campagno, long-term, consistent exploitation will come about not only through war but also the occupation of the conquered territory or the moving of non-kin groups into the already existing ruler's territory, which was perhaps forced.⁶⁴ Either annexing territory

⁵⁹ Anđelković, "Commonwealth," 541.

⁶⁰ Campagno, "Kinship, Concentration of Population." Trigger, Early Civilizations, 47.

⁶¹ Campagno, "War," 690. Trigger, Early Civilizations, 47.

⁶² Campagno, "War," 692.

⁶³ Campagno, "Coercion, Creation, Intervention," 217

⁶⁴ Campagno, "War," 697.

or moving foreigners into the ruler's territory creates what Campagno terms an "interstitial space" in which exploitation can occur, because kinship restrictions do not exist within it.⁶⁵ Sacred leadership is also a facilitating factor in bypassing kinship restrictions according to Campagno.⁶⁶ According to Gat, "overlordship," which he sees as a catalyst for formation of social status, leads to systematic exploitation of another group which is a key step in the development of a state.⁶⁷ Overlordship may be defined as supreme or absolute rule; this definition is inferred by the present author as Gat does not define the term.

The beginning of rulers exploiting their own distant kin in Upper Egypt was probably made possible by the theorized, and perhaps conscious, move to Memphis by the Upper Egyptian elites to use as their new capital.⁶⁸ The location of Memphis was probably chosen also because it is nearer to, and thus facilitated easier managing of, the Delta inhabitants. Whatever the original impetus for its foundation, Memphis functioned as the capital of a unified Egyptian state, encompassing both the regions of Upper and Lower Egypt starting at least as early as Dynasty 1 (ca. 3,000 BCE).

Defining a "Proto-State"

The difference between a "proto-state" and state is usually differentiated by the quantitative increase in both the wealth gap and the use of writing, the latter implying a

⁶⁵ Campagno, "Kinship, Concentration of Population," 495-496.

⁶⁶ Campagno, "Kinship, Sacred Leadership."

⁶⁷ Gat, "Rural Petty State." Campagno, "Coercion, Creation, Intervention."

⁶⁸ Campagno, "Proto-States of Upper Egypt," 9. Campagno, "Foundation of Memphis."

bureaucracy..⁶⁹ Campagno has stated that the term "proto-state" can instead be defined qualitatively as a chiefdom with kinship ties that is exploiting a community without blood relation.⁷⁰ However, defining a "proto-state" qualitatively, rather than quantitatively, may be a more effective means to understand this supposed stage of state formation in Egypt insofar as a qualitative approach may shed light on the root causes of the quantitative changes.

A perhaps similar political entity to the "proto-state" is the "rural petty state." Gat identifies the stage in which a state is still recognizable as such but remains smaller in size and is not yet fully politically tied with neighboring polities of comparable size and complexity as a "rural petty state" (Appendix, Figure). According to Gat, A rural petty state features coercion in the form of organized taxation and at least some socio-political organization outside the bounds of kinship. Egypt appears to have had this type of organization rather than "city petty-states" that civilizations such as Mesopotamia had. Gat opines that this stage cannot be understood as a chiefdom, but that chiefdoms develop into "nascent states," which then develop into "rural petty states." According to Gat, this stage is fleeting due to the tendency of rural petty states to merge into larger political entities due to "power politics," which includes "overlordship" as well as ethnogenesis and bureaucratization.

⁶⁹ Campagno, "Proto-States of Upper Egypt," 7-8.

⁷⁰ Campagno, "Proto-States of Upper Egypt," 9.

⁷¹ Gat, "Rural Petty-State," 128.

⁷² Gat, "Rural Petty-State," 128.

⁷³ Gat, "Rural Petty-State," 128.

⁷⁴ Gat, "Rural Petty-State," 129, 137.

Game Theory and Competition

Competition between "proto-states" in Upper Egypt was likely, as was the acquisition of wealth from smaller settlements nearby. Campagno, Kemp and Trigger reconstruct the nature of the interaction between these "proto-states" as having been violent and organized as raids or even warfare. Campagno imagines that eventually, after one of his hypothesized battles or raids between the "proto-states," which he suggests were at the chiefdom level, the victor would have chosen to occupy the conquered territory and continue to extract wealth rather than retreat and allow the vanquished to rebuild.⁷⁵ This would have bypassed kinship restrictions and catalyzed the formation of a state.

Kemp reconstructs this phase of the Egyptian state and its competition in terms of game theory. The Likened to a game of monopoly, all playing the "game" start equal but then one "nome pre-state" acquires an advantage either by random chance or effort and then another and another until eventually their momentum is unstoppable and the other nome pre-states are either assimilated or destroyed if they choose to resist this "player" who has arisen to political and economic primacy. This momentum is what he terms the "knock-on effect." Maisels reconstructs the unification of Upper Egypt in terms of a new business using momentary advantages to outcompete and subsequently merge with its competitors, the result of which is that they end up with no significant opposition much in the same way as Kemp's game theory model. The same way as Kemp's game theory model.

⁷⁵ Campagno, "War," 697.

⁷⁶ Kemp, *Anatomy*, (2nd ed.) 74.

⁷⁷ Kemp, *Anatomy*, (1st ed.) 74.

⁷⁸ Maisels, *Politics and Power*, 165.

Chiefdoms are characterized by relatively more extreme cycles of growth and decline in regard to political power and wealth when compared to states.⁷⁹ Territorial expansion and exploitation of distant regions is thought to be a way to prevent this and stabilize the state's power and wealth.⁸⁰ Thus, the proposed spread to, and exploitation of the Delta by the Upper Egyptian state is linked crucially to the development of the Egyptian state, specifically the development of the "Upper Egyptian Commonwealth" into the "All-Egyptian Early State," to use the terminology of Anđelković.

Causes of War

A theory developed by Campagno states that the development of the state can be traced back to the unification of Upper Egypt which may be the result of efforts to control trade routes to secure prestige items from outside Upper Egypt.⁸¹ In the chiefdom-level society, this was the only way to uphold one's political power because there was not yet a monopoly on violence according to sociological theory.⁸² From the archeological record, we see that these prestige goods, specifically oil and wine⁸³ from the Levant, as well as ornately carved flint knives, were

⁷⁹ C. S. Spencer, "Territorial expansion and primary state formation," *Proceedings of the National Academy of Sciences USA* (2010), 7120 in Kathryn Bard, "Political Economies," 4. See also Joyce Marcus, "The Peaks and Valleys of Ancient States: An Extension of the Dynamic Model, in *Archaic States*, edited by F. M. Feinman and J. Marcus (School of American Research Press, 1998).

⁸⁰ C. S. Spencer, "Territorial expansion and primary state formation," *Proceedings of the National Academy of Sciences USA* (2010), 7125 in Bard, "Political Economies," 4.

⁸¹ Campagno, "War," 694.

⁸² Campagno, "War," 696.

⁸³ According to P. E. McGovern, "The origins of the tomb U-j Syro-Palestinian type jars as determined by neutron activation analysis." in *Umm el-Qaab II: Importkeramik aus dem Friedhof U in Abydos (Umm el-Qaab) und die Beziehungen ägyptens zu Vorderasien im 4. Jahrtausend v. Chr.*, edited by Ulrich Hartung, (Mainz: Philipp von Zabern), 2001 instrumental neutron activation analysis (INAA) performed on Jar No. 115 from chamber 10 in Tomb

deposited in the graves of elites, creating a constant demand for them by living elite figures.⁸⁴ Other foreign items such as cedar and obsidian were found in Tomb U-j.⁸⁵ Lapis lazuli, which must have originated from the vicinity of modern day Afghanistan, has been found in Egypt since Nagada I, being used for beads and inlay, as well.⁸⁶ Securing trade routes was important for the speculated gift-giving of these exotic materials.⁸⁷

The "Nagada Expansion"

According to all hypothesized models of state formation in Egypt mentioned above, the Egyptian state first emerged in Upper Egypt and subsequently spread to Lower Egypt. The so-called "Nagada expansion" migrationist theory in which southern/Upper Egyptian people, who were perhaps in a state-level society, moved north in large numbers and brought, or even imposed through conquest, 88 their material culture on the Delta inhabitants is not supported by archaeology. 89 Furthermore, mass migration is unnecessary to explain the spread of Upper

U-j concluded that the pottery fabric originated in the Levant, not in Egypt, correlating with the vessel's form. The vessel contained wine according to P. E. McGovern, Glusker, D L; Exner, L J. "The organic contents of the Tomb U-j Syro-Palestinian type jars: resinated wine flavored with fig." in *Umm el-Qaab II: Importkeramik aus dem Friedhof U in Abydos (Umm el-Qaab) und die Beziehungen ägyptens zu Vorderasien im 4. Jahrtausend v. Chr.*, edited by Ulrich Hartung, (Mainz: Philipp von Zabern), 2001.

⁸⁴ Campagno, "War," 697. Campagno, "Kinship, Concentration of Population," 1233.

⁸⁵ Jiménez-Serrano, "Origin," 1127.

⁸⁶ Barbara G. Aston, James A. Harrell, and Ian Shaw, "Stone" Chapter 2 in *Ancient Egyptian Materials and Technology*, eds., Paul Nicholson and Ian Shaw (Cambridge University Press, 2009), 39.

⁸⁷ Campagno, "War," 695.

⁸⁸ Baines, J., "Origins of Egyptian Kingship," in *Ancient Egyptian Kingship*, eds. D. O'Connor and D. Silverman (Leiden: Brill, 1995), 102.

⁸⁹ Köhler, "Culture Wars," in Maczyńska, "Shaky Foundations," 95.

Egyptian material culture to the Delta, because ideas and material culture can be exchanged without a *mass* movement of people.⁹⁰

According to the view of Köhler, the culture-historical line of interpretation sees the north and south as distinct cultures, which neglects the probable complexity of the situation in the north where foreign forms and technologies seem to have been imitated as well as adapted. Mączyńska, following Köhler's original ideas, sees this cultural shift in the ceramics and architecture as well as the appearance of beer brewing facilities as the result of "active participants" in the north. Köhler sees these changes in the material culture of the Delta less as an abrupt imposition from Upper Egyptian people and culture and more as a gradual process that occurred over a relatively longer period of time than is commonly supposed by the migrationist theory.

⁹⁰ Barich, "Comment to: Christiana Köhler," 60-61. Barich reminds us that "pots do not equal people."

⁹¹ Mączyńska, "Shaky Foundations," 97. See E. C. Köhler, "Of Culture Wars and the Clash of Civilizations in Prehistoric Egypt - An Epistemological Analysis." Egypt and the Levant 30 (2020). and E. C. Köhler, "The Interaction between and the roles of Upper and Lower Egypt in the formation of the Egyptian state: another review" In Egypt at its Origins 2, eds. B. Midant-Reynes and Y. Tristant; with the collaboration of J. Rowland and Stan Hendrickx (Leuven; Dudley, MA: Peeters, 2008).

⁹² Mączyńska, "Onset of the Lower Egyptian cultural complex at Tell el-Farkha in the context of the emergence of beer technology in the Nile Delta" in Mączyńska, "Shaky Foundations," 97.

See also J. R. Geller, "Predynastic Beer Production at Hierakonpolis, Upper Egypt: Archaeological Evidence and Anthropological Implications" Ph.D. Dissertation. (Washington University, 1992).

⁹³ Mączyńska, "Shaky Foundations," 97.

⁹⁴ Köhler, "Culture Wars," in Maczyńska, "Shaky Foundations," 98.

Chapter 3: Rock Art

General Remarks

In the desert of Upper Egypt are three major sites where rock art has been found, and which may be dated to the latter period of state formation, which is the Late Predynastic. These scenes were incised onto the rock face, and show animals, humans, manufactured objects, and perhaps symbols and early writing in some cases. It is sometimes challenging to understand the precise intended meaning of the signs in the scene and whether they might be read as ideograms or phonograms or, more specifically, as toponyms or personal names. This difficulty stems from the period during which they were probably carved, which is to say, the period of state formation when codification of art and writing was not yet complete. Consequently, inscriptions including signs that both were and were not to become part of the Dynastic repertoire were used. The meaning of these pre-codification signs is often made further nebulous without such specifications as determinatives that would categorize a sign to a certain category, be it a place name, personal name, or inanimate object. One can compare rock art tableaux to art that has come before and after to try to understand the meaning and significance of rupestrian scenes from the period of state formation.

¹ For the difference between signs and symbols, see Orly Goldwasser, *From Icon to Metaphor*.

² Ideograms represent concepts by virtue of their form while phonograms represent sounds. Thus phonograms do not necessarily represent the same idea as their form of the sign, which is by virtue of the rebus principle. See A. Gardiner, *Egyptian Grammar: Being an Introduction to the Study of Hieroglyphs*, Third edition. (Leuven: Peeters, 1957), §5: "rebus or charade," §17: Phonograms or sound-signs, §22: "Ideograms or sense-signs" and §25: "Purely ideographic writings."

³ See A. Gardiner, *Grammar*, §22, §23 on determinatives, Goldwasser refers to determinatives as "classifiers."

Rock art is usually not dated absolutely with Carbon-14 or similar methods, as there are rarely ceramics or other organic debris associated directly with petroglyphs in Egypt.⁴ None of the tableaux discussed herein have organic materials associated directly with them. Patina itself can, however, be dated absolutely, and this methodology has been applied Egyptian rock art from the Paleolithic.⁵ However, patina is more often used to give a rough estimate of relative age such as differentiating a petroglyph made within the last century versus one made five thousand years ago during the Predynastic Period.⁶ Because sunlight, the main cause of patina, has not been a constant factor over the millennia, the degree of patination should not be relied upon consistently to estimate age.⁷ The depth of incising, the topography of the rock face and the location of the petroglyphs dictate the amount of sunlight to which the scenes were exposed and thus their degree of patination.⁸ Therefore, patina dating may be used as a supplementary dating method, to either question or support dating on stylistic grounds, which has so far proven to be the most common way to date these rupestrian scenes from the period of state formation.⁹

⁴ See Judd, Eastern Desert, 73-86.

⁵ See Dirk Huyge, A. Watchman, M. de Dapper, and E. Marchi, "Dating Egypt's oldest 'art': AMS ¹⁴C age determinations of rock varnishes covering petroglyphs at El-Hosh (Upper Egypt)," *Antiquity* 75 (2001). See also R. G. Bednarik, "Methods of Direct Dating of Rock-Art," *Sahara* 8 (1996).

⁶ Winkler, Rock Drawings Vol. I, 34.

⁷ Winkler, *Rock Drawings Vol. I*, 34. See, however, Červíček, Pavel. "Datierung der nordafrikanischen Felsbilder durch die Patina," *Jahrbuch für prähistorische und ethnographische Kunst* 23 (1973).

⁸ Winkler, Rock Drawings Vol. I, 33-34.

⁹ See Dirk Huyge, "Rock Art," entry in *UCLA Encyclopedia of Egyptology*, eds. Willeke Wendrich, Jacco Dieleman, Elizabeth Frood, and John Baines. 2009. See also, Judd, *Eastern Desert*, 81. See P. S. C. Taçon and C. Chippendale. "An Archaeology of Rock-Art through Informed Methods and Formal Methods." in *The Archaeology of Rock-Art*, edited by C. Chippendale and P. S. C. Taçon (Cambridge: Cambridge University Press, 1998).

Gebel Tjauti "Inscription 1"

The site of Gebel Tjauti is found in the western desert of the Qena Bend (Appendix, Figure 5). "Inscription 1," as Darnell refers to it, shows a scene containing human figures, animals and what seem to be symbols (Appendix, Figures 6-8). The scene is dated to the Nagada IIIA1 Period by virtue of the formal similarity of several of its elements to images found in Tomb U-j (Appendix, Tables 1, 2). The entire back side of the largest human figure at left is made with a smooth, curved line, which renders a relatively prominent buttocks in comparison to Dynastic Art, that also suggests a date of the Nagada III Period as does the rectangular shape of the upper half of the body. The human figures in the tableau specifically have formal similarity to those on tags from Tomb U-j, namely tags X183 and 51 (Appendix, Figures 8-10). We see at left the largest human figure in the tableau who may be the ruler by virtue of the convention of hierarchical scale.

All human and animal figures face right in this tableau. At lower left is perhaps a mountain above a plant to the left of the largest human figure which may signify his dominion over the desert and the Upper Egyptian Nile Valley, possibly signified here by mountains and vegetation, respectively, as in Dynastic-era writing. Specifically, that is *h3s.t* (Gardiner 25) for desert hills and *sw.t/smcw* (Gardiner 23/26) for the Nile Valley. These two signs are comparable, in regard to form, to some of the representations on tags from Tomb U-j (Appendix, Figure 11).

¹⁰ See Orly Goldwasser, *From Icon to Metaphor* for the difference between signs and symbols.

¹¹ Darnell et al., Survey Vol. 1, 11.

¹² Huyge "Painted Tomb," 96-97.

¹³ Huyge "Painted Tomb," 96-97.

¹⁴ See Robins, *Proportion and Style*, 8.

The large figure has short or nonexistent hair and perhaps a beard indicated by a thin, angular element on his chin. He wears what may be a belt and penis sheath. ¹⁵ The element identified as a penis sheath is nearly identical in form to that on the Wadi Nag el-Birka figure, showing that the form of the element on the Gebel Tjauti figure is not unique in the known corpus of rock art (Appendix, Figure 12). ¹⁶ He stands, arm raised forward holding what may be a mace, to the left of a figure who seems to be a prisoner due to his hands appearing to be bound behind his back. The head of this apparently bound figure reaches a lower height than the larger figure and appears to be standing, since his legs are vertical. A line, which represents perhaps a tether, runs from the middle of the presumed prisoner's arm to the lower abdomen of the largest figure. ¹⁷ This figure of seemingly elevated social status holding what looks to be a mace and connected to an apparent prisoner with a line finds parallels with depictions on certain C-ware vessels; the mace in these contexts may indicate control and dominance (Appendix, Figure 13). ¹⁸ Ropes attached to apparent human prisoners, likely also representing control and dominance, appear also on C-Ware vessels, as well as the Oxford knife handle (Appendix, Figures 14-16). ¹⁹

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¹⁵ Darnell et al., Survey *Vol. 1*, 16. See also, regarding penis sheaths in Egyptian art, J. Baines, "Cnḫ-Sign, Belt and Penis-Sheath," *Studien zur Altägyptischen Kultur* 3 (1975) and M. Orriols-Llonch, "Predynastic Tusks and Penis-Sheaths: A New Interpretation," Archéo-Nil 30 (2020) and Ucko, Peter. "Penis Sheaths: A Comparative Study," *Royal Anthropological Institute of Great Britain and Ireland*. Curl Lecture (1969).

¹⁶ Darnell, "Wadi of the Horus Qa'a," 1180.

¹⁷ See *Lexikon der Ägyptologie* entry on bindings ("Fesseln")

¹⁸ Bestock, Violence and Power, 18. Hendrickx and Eyckerman, "Continuity and Change," 123.

¹⁹ Bestock, Violence and Power, 18, 51. Hendrickx and Eyckerman, "Continuity and Change," 123.

This prisoner in Gebel Tjauti "Inscription 1" is associated by proximity to a rectangular bovine (?) head fixed diagonally on a pole between these two human figures. ²⁰ The supposed prisoner has long hair extending past the shoulders and wears a belt and what may be a penis sheath. This element, which extends down and away from the figure's belt, has been interpreted by Darnell as a penis sheath. ²¹ However, the object lacks the upper, protruding element present on the penis sheath (?) of the figure to the left, which suggests that perhaps two distinct objects are represented. The prisoner also has what might be a feather on his head. ²² This may indicate he is a high-status individual according to Judd. ²³ If the feather does indicate this figure's high status, this meaning would be in congruence with the postulated meaning of the bovine head on a stick to which the figure is seemingly tethered and which seems to label him as not only high-status but defeated. If the formal element on his head is a feather, it calls into question the interpretation of Hendrickx that feathers adorn the head of the victor in all Predynastic art. ²⁴

The bovine-head-on-a-stick has been interpreted variously. It is probably not the standard of the seventh upper Egyptian nome as Kahl has suggested, ²⁵ because its form does not correspond with attested images of the goddess Bat. This difference in form is apparent through comparison of the rupestrian image in the tableau to the depiction on a decorated sherd from

²⁰ Darnell et al., Survey *Vol. 1*, 11. Compare another example of this motif from el-Khawy: see John Coleman Darnell, "The Early Hieroglyphic Inscription at el-Khawy," *Archaéo-Nil* 27 (2017): 52, fig. 4.

²¹ Darnell et al., Survey Vol. 1, 16.

²² Darnell et al., Survey Vol. 1, 16.

²³ Judd, Eastern Desert, 98.

²⁴ Hendrickx and Eyckerman, "Continuity and Change," 122.

²⁵ Kahl, "Schriftzeugnisse," in Hendrickx and Friedman, "Gebel Tjauti," 95, 100.

Hierakonpolis, which was incised with a similar rectangular bovine head on a stick on one side and an image of the goddess Bat on the other (Appendix, Figure 17).²⁶ As illustrated on the sherd, the Bat emblem is essentially an inverse image of the prisoner on the other side of the sherd, being rotated one-hundred-eighty degrees. On the sherd, the rectangular bovine head standard is tied to a human prisoner as at Gebel Tjauti.²⁷ The human prisoner on the sherd has been interpreted by Hendrickx and Friedman as a highly stylized female figure either kneeling or sitting and lacking arms.²⁸ She appears to have long hair on both sides of her head and might also wear a cap.²⁹ This shape for females, with large thighs and triangular upper bodies without arms, is common during the Predynastic, as Hendrickx and Friedman show with three dimensional examples. However, any depiction of a female as a prisoner of war would be atypical for both Predynastic and Dynastic Egyptian art.³⁰ Finally, the Bat emblem is always depicted with a triangular-shaped "neck," as on the Gerza palette,³¹ while depictions of the Bat emblem on a pole do not otherwise predate the Fourth Dynasty.³²

²⁶ Hendrickx and Friedman, "Gebel Tjauti," 97.

²⁷ Hendrickx and Friedman, "Gebel Tjauti," 99.

²⁸ Hendrickx and Friedman, "Gebel Tjauti," 98.

²⁹ Hendrickx and Friedman, "Gebel Tjauti," 98.

³⁰ See the figurine from Ballas Tomb 394: Hendrickx and Friedman, "Gebel Tjauti," fig. 3.

³¹ Hendrickx and Friedman, "Gebel Tjauti," 96. Cairo JE 43103

³² Hendrickx and Friedman, "Gebel Tjauti," 96.

Dreyer has suggested that the bovine-head-on-a-stick represents the name of a ruler.³³ This motif finds stylistic and formal affinity in ink potmarks from Tomb U-j.³⁴ It more likely represents the defeat of a politically powerful person.³⁵ The king at this time was symbolized directly as the bull, as seen on the Narmer Palette's bottom register on the verso (Appendix, Figures 1, 2).³⁶ Thus, the symbol is composed of two formal elements, each apparently carrying meaning: the seemingly bovine head, which may represent an enemy ruler, and the pike on which it appears to be impaled, which may communicate his defeat. Thus, this symbol would perhaps label the bound man here as not only perhaps possessing equally high status as his defeater, presumably the largest male figure here positioned to the left of the bovine head on a stick, but would reinforce his current status as defeated along with his bound hands and kneeling posture.

To the right is a long-legged and long-billed bird with its beak immediately above a vertical snake.³⁷ The bird may be attacking it. A line of vultures attacking (?) snakes with their beaks are seen proceeding toward a sacred (?) building on a painted vessel from Qustul,³⁸ and this motif also occurs on the carved Predynastic Abu Zaidan knife handle as the primary,

³³ Dreyer "Schriftzeugnisse," 55, pl. 3d in Darnell et al., Survey Vol. 1, 16.

³⁴ See Regulski, "Origin," 987, fig. 2. See also Dreyer et al., *Umm el-Qaab I*, 184, "Teile von Säugetieren" Gruppe.

³⁵ Darnell et al., Survey *Vol. 1*, 16.

³⁶ Stan Hendrickx and Frank Förster, "Violence," 79.

³⁷ Darnell et al., Survey Vol. 1, 11.

³⁸ Darnell et al., Survey *Vol. 1*, 16. See Graff, Eyckerman and Hendrickx (2011), 453, fig. 13. From Tomb L23, Chicago Oriental Institute Museum 24119.

opening image for the row, functioning perhaps as a label.³⁹ The snake, when being attacked by a stork, perhaps represents the control or defeat of chaos.⁴⁰ This motif was one that was eventually lost due to codification of the official art in the Dynastic Period.⁴¹

An apparent *nm* knife (Gardiner T35) is carved to the right of the stork and snake pair. It is visible on the photograph but not included in the line drawing (Appendix, Figures 6, 7).

Darnell understands the *nm* knife as a later carving. ⁴² A man with long hair appears to the right. The area below his waist appears to have been effaced, producing a single lacuna of consistently altered surface. He may have a penis sheath, which is formally similar to the object that adorns the prisoner figure to his left. He also holds an elongated, narrow object out in front of him, the top of which may have been lost. To the right of him appears a Wepwawet (?) or *imiut* standard which faces him. ⁴³ Wepwawet is associated with the royal funerary cult in the Early Dynastic Period, and comparable fetishes occur also on the Narmer Palette, the Scorpion Macehead, and the "Great Tableau" at the Wadi of the Horus Qa'a (Appendix, Figures 1, 2, 3, 18). ⁴⁴

³⁹ Darnell et al., Survey *Vol. 1*, 16. The motif showing animals organized into rows indicates the concept of order over chaos. See also Graff, Architectural Elements." See also Raffaele "Animal Rows."

⁴⁰ Raffaele "Animal Rows," 264.

⁴¹ Though cats attack snakes in New Kingdom solar myth, with the snake representing the Apep serpent. See the representation on the door jam of the Dynasty 19 Tomb of Sennedjem:. See Smith and Simpson, *Art and Architecture*, 220, fig. 374.

⁴² Darnell et al., Survey Vol. 1, 10-11.

⁴³ Darnell et al., Survey Vol. 1, 15. See also Lexikon der Ägyptologie entry on "Upuaut"

⁴⁴ John Coleman Darnell, "The Wadi of the Horus Qa'a: A Tableau of Royal Ritual Power in the Theban Western Desert," in *Egypt at its Origins 3*, eds., Renée Friedman, P. N. Fiske (Leuven; Paris; Walpole, MA: Peeters, 2011), 1174.

The knife perhaps indicates ritual sacrifice, either to be taken at face value or symbolically, and was likely related to the snake or the prisoner figure, which both appear to the left. We observe on other, roughly contemporary artifacts, an apparent correlation between approximately shoulder length long hair, which is swept back, and the status of humans as captive, defeated, or dominated, namely C-ware vessels and the Oxford knife handle, mentioned previously (Appendix, Figures 13-16).⁴⁵ This correlation would support our understanding of the prisoner figure as such and the figure at far right in the same "register" as one to be dominated, from the Egyptian perspective. Bearing this interpretation in mind, the *nm* knife could likely refer to either or both of these figures.

To the right of the Wepwawet image we have a falcon above a scorpion. This may indicate the royal name of Horus Scorpion, the name that has been attributed to the individual for whom Tomb U-j was constructed (Appendix, Table 6). 46 The bird's mouth appears open on the line drawing, though it is hard to tell if this is a deliberate contrivance or the result of a stray mark, based on the published photograph (Appendix, Figure 7). If the mouth was intended to appear open, the bird might be understood as attacking the scorpion, similar to the stork and snake group from this same "register." Alternatively, both the falcon and the scorpion might be interpreted more generally as royal symbols, without specific reference to a "Horus Scorpion." Ultimately, it is difficult to parse out the intended meaning of the falcon surmounting the scorpion at Gebel Tjauti. It should be noted that the scorpion at Tjauti was carved in a lower

⁴⁵ Bestock, Violence and Power, 18, 51. Hendrickx and Eyckerman, "Continuity and Change," 122.

⁴⁶ Darnell et al., Survey Vol. 1, 14. See also Kahl, "Schriftzeugnisse" and Dreyer et al., Umm el-Qaab I.

⁴⁷ Darnell et al., Survey *Vol. 1*, 14-15.

⁴⁸ Darnell et al., Survey *Vol. 1*, 15.

plane of the rock face, below the fissure that naturally separates the lower scene from the upper, creating natural "registers." Therefore, the falcon and scorpion may not be quite as related as they appear on the schematic drawing. This is more apparent when one examines the photograph (Appendix, Figure 7). Whether it represents a royal symbol, a toponym, or a specific name, the use of the scorpion seemingly signifying someone of elevated social status is primarily a late Predynastic phenomenon, which was eliminated subsequently from the artistic repertoire during codification. The scorpion is difficult to date stylistically, because this motif never seems to have been standardized; it varied in regard to aerial versus profile perspective and the form of their pincers. See also the scorpions in the Gebel Tjauti "Minor" Scorpion Relief and Gebel Tjauti "Inscription 28" (Appendix, Figures 19, 20)

Above the falcon and scorpion images, we observe two long-legged and long-beaked birds associated with a peaked, rectangular structure, likely a shrine based on its formal similarity to a similar object on the Narmer Macehead, which also has parallels on labels from Tomb U-j,⁵³ and at the rupestrian sites of el-Khawy⁵⁴ and Wadi Magar (Appendix, Figures 19, 20).⁵⁵ This shrine might signify the 5th Upper Egyptian nome, called the *b3.wy* or the "dual *bas*,"

⁴⁹ Darnell et al., Survey *Vol. 1*, in Jiménez-Serrano "Chronology," 100.

⁵⁰ Darnell et al., Survey Vol. 1, in Jiménez-Serrano "Chronology," 100.

⁵¹ See Regulski, "Origin,"

⁵² J. M. Kwiecienski, "Depictions of crocodiles and scorpions in Predynastic and Early Dynastic Egypt: The case of the Abydos flint animals," *GM* 257 (2019), 105.

⁵³ Tomb U-i tags 98, 100-105 mentioned also in Darnell "el-Khawy," fig. 8.

⁵⁴ Darnell, "el-Khawy," 52, fig. 4.

⁵⁵ Darnell *Survey Vol. II*, 119, and pl. 148. the so-called "Great Tableau." mentioned also in Darnell "el-Khawy," 56, fig 11b.

in which Gebel Tjauti is located.⁵⁶ Dreyer has suggested that this group represents Bubastis based on a label from Tomb U-j, which however shows only a single stork, which he reads as B?-s.t.⁵⁷ A horned quadruped of indeterminate species roughly frames this group on the tableau with its back and horns. A smaller animal, probably the same species and probably executed by the same artist, based on the two animals' formal and stylistic affinities, was carved to the right.

Moving above the birds-and-shrine group, we observe a falcon with perhaps either a plant frond or feather on its head that appears, by virtue of its apparently different carving technique, to be a later addition.⁵⁸ These falcons with their triangular body shape date the carving stylistically to the Nagada IIC Period, or slightly later.⁵⁹ Above, and to the left of that falcon, we observe a *rpj.t* sign, representing either a mobile shrine or a sedan chair often depicted carrying royal or divine women such as on the Narmer Macehead.⁶⁰

Below the falcon and sedan chair group appears another falcon, we observe a male figure with high, pointed shoulders, which is a feature that is otherwise unparalleled in Predynastic iconography,⁶¹ who also wears what is likely a skin, suggested by the element over his proper right shoulder that may represent the garment's tail.⁶² He holds a staff with a head indicated by

⁵⁶ Darnell et al., Survey Vol. 1, 12.

⁵⁷ Dreyer et al., "Umm el-Qaab I," 139 in Darnell et al., Survey Vol. 1, 12.

⁵⁸ Darnell et al., Survey Vol. 1, 12.

⁵⁹ Darnell et al., Survey Vol. 1, 12.

⁶⁰ Darnell et al., Survey *Vol. 1*, 14. See Lexikon der Ägyptologie entry on "Repit." This sign is also referred to as rpw.t.

⁶¹ From the Dynastic Period, compare the peaked shoulders of a garment worn by the Fourth Dynasty royal lady Meresankh at Giza, which Smith has compared to the royal heb-sed garment (William Stevenson Smith, *A History of Egyptian Painting and Sculpture in the Old Kingdom*, (London: Oxford University Press, 1984), 262).

⁶² Darnell et al., Survey *Vol. 1*, 13.

parallel, oblique lines.⁶³ This apparent skin garment may identify him as a *sm* priest, although at this time, the *sm* was is presumed to have been the king's biological son, who was not responsible exclusively for priestly duties.⁶⁴ He may wear an over-the-shoulder single-strap kilt and perhaps either a waist girdle with hanging decoration or a penis sheath.⁶⁵ A parallel for a kilt of this design can be found on the Narmer Palette, where the object is worn only by Narmer, and thus may signify elevated social status. Both the *rpj.t* and *sm* are associated with falcons in the tableau, which leads Darnell to hypothesize that these figures might represent the king's wife and son, respectively.⁶⁶

Gebel Tjauti "Inscription 1" has been interpreted by Hendrickx as commemorating the return from a conflict between Nagada and the allied polities of Hierakonpolis and Abydos.⁶⁷ This speculative Hierakonpolis-Abydos coalition, possibly led by Scorpion I, is interpreted as the victor by Hendrickx and Friedman (Appendix, Table 6).⁶⁸ Indeed, Hierakonpolis is identified by both the falcon and scorpion, the scorpion finding a link with the many scorpion images in Hierakonpolis that may signify a local cult.⁶⁹ Kahl cites the bovine head on a pole as evidence that the combatants are the seventh Upper Egyptian nome of Hu and Nagada, but this hinges upon the interpretation of the bovine head on a pole as Bat rather than Hathor which has been

⁶³ Darnell et al., Survey *Vol. 1*, 13.

⁶⁴ Darnell et al., Survey Vol. 1, 13.

⁶⁵ Darnell et al., Survey Vol. 1, 15.

⁶⁶ Darnell et al., Survey Vol. 1, 14.

⁶⁷ Hendrickx and Friedman, "Gebel Tjauti," 95, 105-106.

⁶⁸ Hendrickx and Friedman, "Gebel Tjauti," 95. Darnell et al., Survey Vol. 1, 17.

⁶⁹ Kahl "Schriftzeugnisse" in Hendrickx and Friedman, "Gebel Tjauti," 95.

shown to be doubtful on formal grounds.⁷⁰ Continued wealth of Hierakonpolis in the Nagada IIIA-B periods as evidenced in Hierakonpolis Elite Cemetery 6 shows an alliance with Abydos is more probable than a war.⁷¹ This supposed conflict and its outcome is supported, perhaps, by the increase from the Nagada IIIA Period onward of the size of the tombs in Cemetery U at Abydos and the decrease in the number of tombs in the elite Cemetery T in Nagada.⁷²

Monopoly on violence, a diagnostic feature of a state, is perhaps illustrated in the bound human figure and the bovine head on a pike that seems to label him as a defeated high-status person. Depictions of violence should be differentiated from actual violence. There is no archaeological evidence of warfare in the process of unification of Upper Egypt itself or of Upper Egypt with Lower Egypt, violent depictions being more likely symbolic in nature.⁷³

I will date Gebel Tjauti "Inscription 1" to Nagada IIIA1 based on formal similarity with tag and potmark images from Tomb U-j as mentioned above in regard to the two long-beaked birds and the bovine-head-on-a-stick motif. The form of the largest human figure correlates with others of Nagada III according to Huyge.⁷⁴ The style of the falcons suggests a date of the Nagada IIC Period, or slightly later.⁷⁵ Writing may be present in the desert hills sign (Gardiner 25), a possible plant sign (Gardiner 23/26) and the two long-beaked birds. The use of a scorpion as an indicator of elevated social status and the presence of the bovine-head-on-a-stick motif suggest

⁷⁰ Kahl, "Schriftzeugnisse," in Hendrickx and Friedman, "Gebel Tjauti," 95.

⁷¹ Hendrickx and Friedman, "Gebel Tjauti," 104.

⁷² Darnell et al., Survey Vol. 1, 17 and Hendrickx and Friedman, "Gebel Tjauti," 103.

⁷³ Hendrickx and Förster, "Violence."

⁷⁴ Huyge, "Painted Tomb."

⁷⁵ Darnell et al., Survey Vol. 1, 12.

strongly a Predynastic date as these two symbols were lost in the Early Dynastic Period due to codification.

Anđelković dates Gebel Tjauti "Inscription 1" to the period of the All-Egyptian Early State (ca. Nagada IID2-IIIB/C1, so-called Dyansty 0) and interprets the tableau as the recording of the quelling of a play for independence by Lower Egyptian elite to restore the pre-centralized order. Anđelković characterizes the Egyptian state at this stage as unified in regard to the economy and politics of Egypt, having a well-developed bureaucracy, and comprising Upper and Lower Egypt under the rule of one king.

Elements in the tableau support this stylistic dating, because they correlate with Andelković's description of his stage of the All-Egyptian Early State. If the two long-beaked birds on ether side of the apparent structure represent the toponym Bubastis, as Dreyer has stated, then a Delta locality may be represented, which would signify territorial expansion of the Egyptian state. If the scorpion and the falcon that surmounts it represent toponyms, we could have either coalition or competition with other Upper-Egyptian "proto-states." The smiting scene suggests elevated social status and is perhaps comparable to Dyanstic-era smiting scenes, which communicated the king's legitimacy and power. The hierarchical scale of the largest figure seems to show elevated social status as do the symbols of the bovine-head-on-a-stick and the scorpion. Since the bovine-head-on-a-stick is thought to label the bound, kneeling man as a defeated rival of equal, elevated social status, competition may be represented. Possible writing implies bureaucracy.

⁷⁶ Anđelković, "Commonwealth," 540.

Gebel Sheikh Suleiman Major Tableau

The second major rock art site examined in this thesis is Gebel Sheikh Suleiman. I will refer to the tableau discussed in this subsection as the "Gebel Sheikh Suleiman Major Relief/Tableau" to distinguish it from the "Gebel Sheikh Suleiman "Minor" Scorpion Relief/Tableau." This carving, which is now in the Khartoum Museum, was originally located around the Second Cataract near the Pharaonic-Era towns of Kor and Buhen (Appendix, Figure 21). The main elements from right to left are a serekh addorsed by a falcon; a standing, apparently bound figure; another apparently bound, kneeling figure; and a boat, while what appear to be limp, dead bodies are splayed out below. Small elements that may be early writing, or perhaps direct ancestors of writing, are present at the lower center of the composition and to the right of the face of the kneeling figure. There have been four distinct facsimile drawings and three slightly different interpretations of the tableau (Appendix, Figures 22-24). The overall meaning of the scene is, however, not as contentious; it is thought to represent a violent liaison between Egyptians and Nubians, since it was found south of Aswan.

⁷⁷ See Winifred Needler, "A Rock-Drawing on Gebel Sheikh Suliman (near Wadi Halfa) showing a Scorpion and Human Figures." *JARCE* 6 (1967).

⁷⁸ Somaglino and Tallet, "Gebel Sheikh Suleiman," 123.

⁷⁹ See *Lexikon der Ägyptologie* entry on serekhs ("Palastfassade")

⁸⁰ According to Regulski, "Origin." See *Lexikon der Ägyptologie* entry on rupestrian inscriptions ("Felsinschriften")

⁸¹ By Somaglino and Tallet, "Gebel Sheikh Suleiman," Arkell, "Varia Sudanica," Murnane, "The Gebel Sheikh Suleiman Monument" and Williams, "The Gebel Sheikh Suleiman Monument." Williams does not offer a single facsimile drawing with all the formal elements included therein, but instead examines the elements in a relatively piecemeal fashion.

⁸² Murnane, "The Gebel Sheikh Suleiman Monument," 284. Walter B. Emery, *Egypt in Nubia* (London: Hutchinson, 1965), 125.

The standing figure in the tableau appears to be connected to the serekh by two roughly parallel, curving lines via the back of his head. He features what is probably a short hairstyle while the kneeling man has a single line along his head that Bestock interprets as hair; the kneeling man also has an ear indicated.⁸³ On Somaglino and Tallet's drawing, the two seemingly dead figures also have a similar hairstyle as that on the standing figure at far left (Appendix, Figure 24).

The kneeling prisoner, who faces right in the tableau, has been shot with a fletched arrow that is still lodged in his chest. He also seems to be wearing a kilt. In Somaglino and Tallet's drawing, a long, tapering, narrow object projects off of the prow of the boat and overlaps his neck. This element perhaps signifies that he is tied, via a rope at his neck, to the prow of the boat. He author; Arkell and Murnane show only a tall vertical element, perhaps a mast, and Murnane shows additional rectangular elements behind the apparent mast at the far end of the stern (Appendix, Figures 22, 23). Somaglino and Tallet show no mast but two rectangular elements. The motif of a human prisoner tied to a boat's prow by means of a rope is also found on the decorated Incense Burner from Qustul Tomb L24 (Appendix, Figure 25). The boat probably represents the king. The ropes are thought to represent control and dominance in these instances with boats, and likewise when the rope connects the prisoner to figures thought to be of

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⁸³ Bestock, Violence and Power, 64.

⁸⁴ Somaglino and Tallet, "Gebel Sheikh Suleiman," 126.

⁸⁵ Somaglino and Tallet, "Gebel Sheikh Suleiman," 126.

elevated social status on C-ware vessels and the Oxford knife handle (Appendix, Figures 14-16).86

The banded, horseshoe-shaped sign the the right of the head of the kneeling man in the tableau might name him, or his tribe, as *md* (Gardiner V19/20) according to Somaglino and Tallet rather than functioning as a pictogram and representing a structure as Arkell, Williams and Murnane have interpreted. Reference and an enemy ethnic group is perhaps also shown on the front of the Narmer Palette with the rectangle addorsed by a slender, hooked sign next to the fallen enemy Narmer grasps by the hair (Appendix, Figures 1, 2). The horseshoe-shaped sign in the Gebel Sheikh Suleiman Major Tableau could also stand for the number ten, and this interpretation would be in keeping with how this sign is known to have been used during the late Predynastic. Reference in the enemy dead as on the base of two statues of Khasekhemwy (Appendix, Figure 26). The limp, sprawling nature of the bodies below the boat in the tableau may signify dead enemies as on the Narmer and Battlefield Palettes as well as on the base of the two statues of Khasekhemwy.

In the Gebel Sheikh Suleiman Major Tableau, a sign appears above the serekh and overlapping the lower body of the falcon surmounting it. Arkell reads it as dr (Gardiner M37) and alleges that it represents the First Dynasty king of that name.⁸⁹ It is much more deeply

⁸⁶ Bestock, Violence and Power, 18, 51. Hendrickx and Eyckerman, "Continuity and Change," 123.

⁸⁷ Somaglino and Tallet, "Gebel Sheikh Suleiman," 126. Arkell, "Varia Sudanica," 29 and Williams, "The Gebel Sheikh Suleiman Monument" and Murnane, "The Gebel Sheikh Suleiman Monument," 283.

⁸⁸ Kahl, *Hieroglyphenschrift in der 0.-3. Dynastie*, 772-773, and Ilona Regulski, *A Paleographic Study of Early Writing in Egypt* (Leuven; Paris; Walpole, MA: Peeters, 2010), 676-677 in Somaglino and Tallet, "Gebel Sheikh Suleiman," 126.

⁸⁹ Arkell, "Varia Sudanica," 29.

incised into the stone than any of the other elements in the tableau and also overlaps the lower part of the falcon, which neither Arkell nor Murnane include in their drawings, leaving the bird's lower body out of their rendering of the tableau. 90 The posited $\underline{d}r$ sign also overlaps the upper left corner of the serekh. Somaglino and Tallet were able to discern the lower part of the bird but likewise left out the alleged $\underline{d}r$ sign in their rendering. It is apparent in Murnane's drawing that what was thought to be $\underline{d}r$ is more likely a horned quadruped; the animal was determined to be a later addition due to its overlap with the serekh and the apparent preparation and consequent effacing of the falcon and part of the serekh. 91 Arkell, in contrast, sees the horned quadruped as the result of editing of what was originally a $\underline{d}r$ sign, which he asserts was meant to represent the First Dynasty king of that name. 92

The serekh in the tableau is plain rather than anonymous, meaning that there was never intention to inscribe a name.⁹³ Specifically, it is the type of "plain" "dotted" serekh,⁹⁴ a type that is found from the Predynastic through the Middle Kingdom, ⁹⁵ and which finds comparison, formally, with a bracelet found in the Tomb of Djer.⁹⁶ The issue with using this object for dating

⁹⁰ Murnane, "The Gebel Sheikh Suleiman Monument," 283.

⁹¹ Murnane, "The Gebel Sheikh Suleiman Monument," 283.

⁹² Arkell, "Varia Sudanica," 29.

⁹³ Terminology of van den Brink, "Pottery-Incised Serekh-Signs Part II" in Somaglino and Tallet, "Gebel Sheikh Suleiman," 126.

⁹⁴ Terminology of van den Brink, "Pottery-Incised Serekh-Signs Part II" in Somaglino and Tallet, "Gebel Sheikh Suleiman," 126.

⁹⁵ H. Whitehouse, "Further Excavation amongst the Hierakonpolis Ivories" in *Egypt at its origins. Studies in memory of Barbara Adams*, eds. S. Hendrickx, Renée Friedman, K. M. Ciałowicz, and M. Chłodnicki (Leuven; Paris; Dudley, MA: Peeters), 1115-1128 in Somaglino and Tallet, "Gebel Sheikh Suleiman," 127.

⁹⁶ Somaglino and Tallet, "Gebel Sheikh Suleiman," 127.

the serekh on the tableau is that the bracelet was found stashed in a crack in the tomb and could potentially be from any period.⁹⁷ It could have been moved at a later period as postulated by Petrie.⁹⁸ Somaglino and Tallet assert that the upright posture of the falcon on the serekh suggests a date during the reign of Aha or Djer onward.⁹⁹

The serekh in the tableau may also be shown smiting the standing prisoner, based on Somaglino and Tallet's new drawing. If so, it would allow us to date the carving to the time between the reigns of Narmer and Djet, because the smiting serekh is only known from this time frame. 100 Jiménez-Serrano sees the hieroglyph dr as a later addition and dates the serekh stylistically to no later than the hypothesized reign of Ka (Appendix, Table 2). 101

Two spiral motifs occur in the tableau. They are located to the right of the standing figure and in front of his lower leg. A nearly identical symbol is also represented at his hands. It resembles the bow sign used to designate Nubia as well as the first Upper Egyptian nome (Gardiner AA32). In conjunction with the rectangular sign below, which might be identified as Gardiner N16, one might read *t3-setj*, which could either indicate Nubia or the first Upper Egyptian nome (Gardiner AA32). The spiral element at the figure's hands may alternatively

⁹⁷ Williams, "The Gebel Sheikh Suleiman Monument," 22-23.

⁹⁸ W. M. F. Petrie and F. Griffith, "The Royal Tombs of the Earliest Dynasties Part II," Egypt Exploration Fund Memoir 21(London: Gilbert and Rivington, 1901), 16-17.

⁹⁹ Stan Hendrickx, Renée Friedman and Merel Eyckerman, "Early Falcons," in *Vorspann oder formative Phase?*Ägypten und der Vordere Orient 3500-2700 v.Chr., eds., L. D. Morenz and R. Kuhn (Wiesbaden: Harrasowitz, 2011), 142-143. and Ilona Regulski, A *Paleographic Study of Early Writing in Egypt*. (Leuven; Paris; Walpole, MA, 2010), 752-762. cited in Somaglino and Tallet, "Gebel Sheikh Suleiman," 127, fn 14.

¹⁰⁰ Somaglino and Tallet, "Gebel Sheikh Suleiman," 128.

¹⁰¹ Jiménez-Serrano "Chronology," 111.

¹⁰² Somaglino and Tallet, "Gebel Sheikh Suleiman," 128.

represent a binding. 103 Bestock asserts that there is no reason it could not be both, that is, a bow functioning as fetters. 104 According to Williams, this sign could also represent a coiled rope as on the Gebel Arak knife handle (Appendix, Figures 27-29). 105 However, this would prompt the same understanding of the identical sign to the right of the figure, in which case it seems to be writing, rather than a symbol lacking semantic value, due to its association with the rectangular sign. The rectangular sign is possibly to be read as \check{s} (Gardiner N39), the meaning of which in the latter case would be difficult to reconcile.

The Narmer Palette shows a similar rectangular sign to the one observed in the bottom center of the composition of the tableau. Like the motif in the tableau, the one represented on the Narmer Palette has internal, horizontal striations; this motif is located to the right of Narmer's apparent enemy on the front side of the palette (Appendix, Figures 1, 2). On the Narmer Palette, the rectangular sign is also surmounted by a symbol, in that case commonly identified as a harpoon, which finds a close cognate in Gardiner T21. Williams asserts that the bow sign above the \check{s} sign is not a bow but a single curl which has parallels on labels from Tomb U-j where it probably indicates a number as in the Dynastic Period but, however, has an unknown meaning here (Appendix, Figure 30). ¹⁰⁶ Bows are thought to have indicated control over animals and humans in art from the Predynastic Period. ¹⁰⁷

¹⁰³ Somaglino and Tallet, "Gebel Sheikh Suleiman," 128.

¹⁰⁴ Bestock, Violence and Power, 63

¹⁰⁵ Williams, "The Gebel Sheikh Suleiman Monument," 18.

¹⁰⁶ See Tomb U-j tags 39-43 in Dreyer et al., *Umm el-Qaab I*, 117, fig. 75 and his Zahlen Gruppe. Williams, "The Gebel Sheikh Suleiman Monument," 24-25.

¹⁰⁷ Darnell, "Wadi of the Horus Oa'a," 1177.

Situated at bottom center of the composition of the tableau are two *njw.t* signs (Gardiner O49) surmounted by a falcon at left and a *nbw* (?) collar (Gardiner S12) at right, the identification of the latter being based on Somaglino and Tallet's new drawing. ¹⁰⁸ These may represent Hierakonpolis and Nagada, respectively. ¹⁰⁹ Nagada was known as *nbw.t* from the reign of the Second Dynasty king Peribsen, but this name could be older. ¹¹⁰ The tableau may document the defeat of Nubian enemies by a king who is allied with Hierakonpolis and Nagada based on the two possible hieroglyphic signs at bottom center surmounting apparent *njw.t* signs, the ideogram for "city" apparently functioning here as a determinatives. ¹¹¹

The Gebel Sheikh Suleiman Major Tableau may show defining features of a state. The dead bodies and the two men with their arms apparently bound behind their back may show monopoly on violence, a key feature of a state. The boat probably represents the king. The ropes are thought to represent control and dominance as on C-ware vessels and the Oxford Knife Handle (Appendix, Figures 14-16). The tableau, may be symbolic rather than anecdotal, attempting to discourage any rebellion or challenges to his position with a threatening image of

¹⁰⁸ Somaglino and Tallet, "Gebel Sheikh Suleiman," 130.

¹⁰⁹ Somaglino and Tallet, "Gebel Sheikh Suleiman," 130.

¹¹⁰ Somaglino and Tallet, "Gebel Sheikh Suleiman," 130.

¹¹¹ Somaglino and Tallet, "Gebel Sheikh Suleiman," 132. For the difference between signs and symbols, see Goldwasser, *From Icon to Metaphor*. For ideograms and determinatives, see Gardiner, *Grammar*, 8, 30, 31: §6, §22, §23.

¹¹² Somaglino and Tallet, "Gebel Sheikh Suleiman," 126.

¹¹³ Bestock, Violence and Power, 18, 51. Hendrickx and Eyckerman, "Continuity and Change," 123.

what might happen to enemies of the state. ¹¹⁴ In either case, the apparent violent, domineering nature of the tableau combined with the serekh, surely representing the office of the king already in the late Predynastic, suggests sovereignty and "power." ¹¹⁵ The domination of subgroups in a society, as seems to be represented in the tableau, implies a class with elevated social status. Writing is present here in the two *njw.t* signs surmounted by possible toponyms, a possible *md* sign, and the possibly present birth name of Djer, which was *Jt*. ¹¹⁶ Writing implies bureaucracy, which is a diagnostic feature of a state. ¹¹⁷

The Gebel Sheikh Suleiman Major Tableau has been dated variously. Williams asserts that elements such as the dead bodies and the boat's particular features find their best comparisons to the time of Narmer based on the scenes on the Narmer Palette. The added girth of the prow and the structures date the boat to time of Narmer, based also on the Narmer Palette, while the upright stern is a Predynastic characteristic. A reed leaf sign (Gardiner M17) located to the right of the falcon may be the first letter of Djer's birth name, *Jt*; if so, it might date the tableau to the reign of this king. There is also the possibility that this sign was a later addition;

¹¹⁴ Hendrickx and Förster, "Violence." See also, Ellen Morris, "Propaganda and Performance at the Dawn of the State." Chapter 1 in *Experiencing power, generating authority. Cosmos, politics, and the ideology of kingship in Ancient Egypt and Mesopotamia*, edited by Jane Hill, Phillip Jones, and Antonio J. Morales (Philadelphia: University of Pennsylvania Press, 2013), 49-53.

¹¹⁵ See Juan Carlos Moreno García, *The state in ancient Egypt: power, challenges and dynamics*, (London; New York: Bloomsbury Academic, 2020).

¹¹⁶ Somaglino and Tallet, "Gebel Sheikh Suleiman," 130.

¹¹⁷ Jiménez-Serrano, "Origin," 1127.

¹¹⁸ Somaglino and Tallet, "Gebel Sheikh Suleiman," 125.

¹¹⁹ Somaglino and Tallet, "Gebel Sheikh Suleiman," 125.

¹²⁰ Somaglino and Tallet, "Gebel Sheikh Suleiman," 130.

in that case, it would provide a terminus ante quem. The tableau can be attributed to the reign of Djer based not on the writing of his throne name Dr as Arkell suggested, which is more likely a quadrupedal animal carved later as Murnane suggested, but on the possible writing of his birth name Jt. With the attribution to Djer and the dating of the style of the serekh being inconclusive, the style of the boat would suggest a date of late Dynasty 0, which falls within the time span of Anđelković's "All-Egyptian Early State" (ca. NagadaIID2- IIIB/C1) (Appendix, Tables 1, 8). However, if that analysis is correct, then the falcon, which belongs otherwise to the reign of Aha or Djer onward, 122 would need to be regarded as a later addition for this dating to be valid.

Elements in the tableau support this stylistic dating, because they correlate with Andelković's description of his stage of the All-Egyptian Early State. Andelković characterizes the Egyptian state at this stage as unified in regard to the economy and politics of Egypt, having a well-developed bureaucracy, and comprising Upper and Lower Egypt under the rule of one king. Possible writing implies bureaucracy. Possible toponyms suggest either coalition or competition with Upper-Egyptian towns. The dead enemies might represent the aftermath of the quelling of resistance from a local ruler against the new state regime, which is how Andelković interpreted the pair of the largest, smiting figure and the bound figure in Gebel Tjauti "Inscription 1." The serekh symbolizes, as it did in the Dynastic Period, the office of the king.

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¹²¹ Arkell, "Varia Sudanica" in Somaglino and Tallet, "Gebel Sheikh Suleiman," 125. Somaglino and Tallet, "Gebel Sheikh Suleiman," 130.

¹²² Stan Hendrickx, Renée Friedman and Merel Eyckerman, "Early Falcons," in *Vorspann oder formative Phase?* Ägypten und der Vordere Orient 3500-2700 v.Chr., eds., L. D. Morenz and R. Kuhn (Wiesbaden: Harrasowitz, 2011), 142-143. and Ilona Regulski, *A Paleographic Study of Early Writing in Egypt*. (Leuven; Paris; Walpole, MA, 2010), 752-762. cited in Somaglino and Tallet, "Gebel Sheikh Suleiman," 127, fn 14.

Wadi Nag el-Hamdulab Site 7a Tableau

The site of Wadi Nag el-Hamdulab is located six kilometers north of Aswan on the West Bank (Appendix, Figure 34). 123 At Site 7a is portrayed a left-facing procession of an unnamed ruler (?) accompanied by his retinue among ships (Appendix, Figures 35-37). The main figure is situated approximately in the middle of the procession. He wears a tall crown and carries a long staff with a gently curved head and a shorter implement of the same thickness but with a more sharply curved head. He carries the former implement upright, but with the lower end extended slightly forward, and the latter implement horizontally. Both his arms are bent at the elbow. Standard bearers are placed in front of the crowned figure. The standards are surmounted by a placenta and a recumbent canine, the latter possibly representing Wepwawet, the same standards represented on the Scorpion Macehead and Narmer Palette. 124 A canine companion is located slightly below and to the left of this crowned figure. A fan bearer behind the crowned figure seems to have a visible penis or penis sheath. 125 Two tribute bearers bring up the rear of the procession, the nearest to the crowned figure holding a jar above his head and the further figure a long, thin object that may be an animal skin. 126 Five boats are present with three below the procession, one behind and one above. A team of four figures tow the boat(s), the rope not being

¹²³ Darnell, "Hieroglyphic Annotation," 19.

¹²⁴ Darnell, "Hieroglyphic Annotation," 23.

¹²⁵ Hendrickx, Darnell, Gatto, and Eyckerman "Iconographic and Paleographic Elements," 297.

¹²⁶ Hendrickx, Darnell, Gatto, and Eyckerman "Iconographic and Paleographic Elements," 301.

fully represented, which fits with other nautical processions illustrated as petroglyphs in Egypt. 127

The Wadi Nag el-Hamdulab Site 7a tableau includes a mix of elements from before and after artistic codification. The acuteness of the top of the main figure's crown is seen elsewhere in Predynastic Period rock art but not Dynastic Period art. Darnell also notes the angle of the crown which is straight rather than slightly tipped back as would become standard; see for instance the Narmer Palette and Scorpion Macehead for examples of this crown in the standard orientation (Appendix, Figures 1-3). Lack of a name for the ruler (?) and presence of a dog in association with and communicating the political significance of an individual point to a Predynastic Period date, specifically late Dynasty 0 (the Nagada IID2-IIIB/C1 Periods (ca. 3450 - 3150 BCE)) (Appendix, Table 1). Darnell also notes the main figure's crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen elsewhere in Predynastic Period art. Darnell also notes the angle of the crown is seen

On the Wadi Nag el-Hamdulab Site 7a tableau, we observe for the first time an intimation of hierarchical scale, which indicates that the king is superior in rank to all others. ¹³¹ Only the

¹²⁷ Hendrickx and Gatto, "A Rediscovered Late Predynastic-Early Dynastic Royal Scene," 149. Hendrickx, Darnell, Gatto, and Eyckerman "Iconographic and Paleographic Elements," 300-301; Darnell, "Iconographic attraction, iconographic syntax and the tableaux of royal ritual power in the Pre- and Proto-Dynastic rock inscriptions of the Theban Western Desert," Archéo-Nil 19 (2009), 91-92 all cited therein. Wadi Qash, site 18 (Winkler, *Vol. I*, XIV-2) in Stan Hendrickx, Stan Swelim, F. Raffaele, Merel Eyckerman, and R. Friedman, "A lost Late Predynastic-Early Dynastic royal scene from Gharb Aswan," *Archéo-Nil* 19 (2009), fig. 4.

¹²⁸ See Hendrickx, "The Origin and Early Significance of the White Crown" (2015), fig. 1 for a statuette as well as Brooklyn 35.1266; see also rock art such as Wadi Mahamid, site 81:1 in which is depicted an individual who holds a similar curved staff/scepter. Stan Hendrickx, Stan Nabil, Francesco Raffaele, Merel Eyckerman and Renée Friedman "A lost Late Predynastic-Early Dynastic royal scene from Gharb Aswan" *Archaéo-Nil* 19 (January 2009), fig. 5.

¹²⁹ Darnell, "Hieroglyphic Annotation," 23.

¹³⁰ Hendrickx, Darnell, and Gatto, "The Earliest Representations of Royal Power," 1073. Darnell, "Hieroglyphic Annotation," 19.

¹³¹ Darnell, "Hieroglyphic Annotation," 22. See Robins, *Proportion and Style*, 8.

fan bearer is the same height as the ruler here. The bottommost boat is empty except for a central structure. It has what has been interpreted as carrying a shrine which would bring a religious meaning to the tableau. This tableau may anticipate Dynastic convention with its formal registers. There is still royal symbolism here with the dog, bovine horns, purported falcon, and apparent maces, but the anthropomorphic image of the king takes primacy. Because of the aforementioned blending of pre- and post-codification elements, Hendrickx, Darnell and Gatto consider this tableau to be the latest known scene of a nautical Jubilees of the Predynastic Period, belonging to the "Greater Pharaonic Cycle" of Williams and Logan, who assign the scene in the tableau to the category of "return-sacrifice." 134

The composition of the Wadi Nag el-Hamdulab Site 7a tableau is amassed of relatively discrete units, whether this was intended to indicate separate events or not. ¹³⁵ This separation of events rather than a temporal blending contrasts with previous art like the painted wall in Hierakonpolis Tomb 100 but not known Dynastic *heb sed* scenes until the late Eighteenth Dynasty. ¹³⁶

¹³² Hendrickx, Darnell, Gatto, and Eyckerman "The Earliest Representations of Royal Power," 300.

¹³³ Hendrickx, Darnell, and Gatto, "The Earliest Representations of Royal Power," 1081.

<sup>Hendrickx, Darnell and Gatto, "The Earliest Representations of Royal Power," 1081.
B. B. Williams and T. J. Logan, "The Metropolitan Museum Knife Handle and Pharaonic Imagery Before Narmer"</sup> *JNES*, 46, no. 4 (1987), 258.

¹³⁵ Darnell, "Hieroglyphic Annotation," 22. See also Williams and Logan, "The Metropolitan Museum Knife Handle."

¹³⁶ Darnell, "Hieroglyphic Annotation," 22. See also H. Frankfort, "The King's Ceremonial, The Sed Festival" Chapter 6 in *Kingship and the Gods: A Study of Ancient Near Eastern Religion as the Integration of Society and Nature* (Chicago: University of Chicago Press, 1948).

The Wadi Nag el-Hamdulab Site 7a tableau may communicate martial and political power through symbolism.¹³⁷ A crown worn by the ruler appears for the first time in the context of a scene of apparent religious and/or political significance.¹³⁸ The Wepwawet (?)¹³⁹ standard being carried in front of the king may also have religious significance in regard to the ruler depicted here or may indicate his elevated social status, perhaps even that he is royalty.¹⁴⁰ Along with a possible falcon, located on the prow of the ship immediately below the procession, possible maces adorning cabins on the boat below the ruler and bull-horn standards adorning the same boat, we have perhaps signified here a king who reigns supreme within both the political and religious spheres, which was the dual nature inherent to divine kingship in Dynastic times.¹⁴¹ The crowned figure holds a curved implement that may represent elevated social status. A wooden, curved-head scepter was found in Tomb U-j which matches the shorter implement held by the crowned figure in the tableau in regard to form (Appendix, Figure 38). Both most closely resemble the *wis* scepter (Gardiner S40), which means "to have dominion." The larger implement held by the crowned figure finds its closest match to Gardiner S39, the "peasant's

¹³⁷ Hendrickx, Darnell, and Gatto, "The Earliest Representations of Royal Power," 1075.

¹³⁸ Hendrickx, Darnell, and Gatto, "The Earliest Representations of Royal Power," 1080.

¹³⁹ Darnell, "Hieroglyphic Annotation," 23.

¹⁴⁰ Darnell, "Wadi of the Horus Qa'a," 1174. See also H. Frankfort, *Kingship and the Gods* (Chicago: Chicago University Press, 1948), 71.

¹⁴¹ Hendrickx, Darnell, and Gatto, "The Earliest Representations of Royal Power," 1079.

¹⁴² Raymond Faulkner, A Concise Dictionary of Middle Egyptian (London: Griffith Institute, 2017), 68.

crook."¹⁴³ However, according to Gardiner, S39 is usually replaced with S38, the hq3 scepter, which is used to write the verb hq3, "to rule."¹⁴⁴

Writing observed in the scene at Wadi Nag el-Birka Site 7a provides a terminus post quem of Nagada IIIA1. However, the scene should be dated to late Dynasty 0 because of the aforementioned parallels in terms of composition and style with the Scorpion Macehead and Narmer Palette as well as the mixture of pre- and post-codification elements. Hours, I will date the scene at Wadi Nag el-Birka Site 7a to Anđelković's phase of the "All-Egyptian Early State" (Nagada IID2-IIIB/C1 Periods). Anđelković characterizes the Egyptian state at this stage as unified in regard to the economy and politics of Egypt, having a well-developed bureaucracy, and comprising Upper and Lower Egypt under the rule of one king.

Elements in the tableau support this stylistic dating, because they correlate with Andelković's description of his stage of the All-Egyptian Early State. Possible writing implies bureaucracy. The greater size of the crowned figure in relation to all but one of the figures suggests that he is more important than the others, possibly a king. The crown he wears also signifies, as in the Dynastic Period, that he is the king. Both implements he holds in his hands suggest that he holds power and an elevated position, as mentioned previously. The dog below him also suggests that he has elevated social status.

¹⁴³ Gardiner, *Grammar*, 509.

¹⁴⁴ Gardiner, *Grammar*, 508.

¹⁴⁵ Hendrickx, Darnell, Gatto, and Eyckerman, "Iconographic and Paleographic Elements," 313.

¹⁴⁶ Hendrickx, Darnell, Gatto, and Eyckerman, "Iconographic and Paleographic Elements," 313.

¹⁴⁷ See Anđelković, "Commonwealth," 540-541.

Wadi Nag el-Hamdulab Site 7a Inscription

An inscription occurs in tandem with the Wadi Nag el-Hamdulab site 7a tableau which Darnell has interpreted as referring to the "Following of Horus," a biennial expedition around the king's domain which involved collecting taxes in Dynastic times (Appendix, Figures 35, 39-41). Darnell reads, in retrograde, "Šmsw <-Ḥr-> nḥb B?: "Nautical Following <of Horus>; taxation of Panther-Skin Town." The inscription features the same level of patination and is pecked in the same manner as the scene, suggesting it was made at the same time and therefore might describe the scene. 150

Darnell states that the Wepwawet standard within the Wadi Nag el-Hamdulab Site 7a tableau could function as a determinative for the "Following of Horus" although the sign in the tableau is missing the mace that crosses the standard's pole (Gardiner E19). ¹⁵¹ Darnell also tentatively identifies a bound human figure on a ship in front of a pole with a mace attached above in The Wadi of the Horus Qa'a "Group V" as representing the "Following of Horus"; the

¹⁴⁸ T. A. H. Wilkinson, *Early Dynastic Egypt*. (London; New York: Routledge, 1999), 220-221 and *Wörterbuch der ägyptischen Sprache* IV, 485 in Hendrickx, Darnell, Gatto, and Eyckerman, "Iconographic and Paleographic Elements," 309.

¹⁴⁹ Darnell, "Hieroglyphic Annotation," 29. That is Gardiner T18 + M9 + F9 + O49. K. Sethe, *Die Altägyptischen Pyramidentexte nach den Papierabdrucken und Photographien des Berliner Museums* (Leipzig, 1910), PT §1245c in John Coleman Darnell, "Hieroglyphic Annotation," 32. See also R. S. Simpson, "Retrograde writing in ancient Egyptian inscriptions," in *Illuminating Osiris: Egyptological studies in honor of Mark Smith*, eds. Richard Jasnow, and Ghislaine Widmer (Atlanta: Lockwood Press, 2017). See also Kahl, *Hieroglyphenschrift in der 0.–3. Dynastie*, 42-47. See also *Lexikon der Ägyptologie* entry on Hieroglyphs ("Hieroglyphen"), section D. Orientation.

¹⁵⁰ Hendrickx, Darnell, Gatto, and Eyckerman, "Iconographic and Paleographic Elements," 308-309.

¹⁵¹ Sethe, *Pyramidentexte*, PT §1245c; T. DuQuesne, *The Jackal Divinities of Egypt I: From the Archaic period to Dynasty X* (London: Da'th Scholarly Services; Darengo Publications, 2005), 63-64, 111, 116, 412 in Darnell, "Hieroglyphic Annotation," 32. See also, according to Darnell, Sethe, *Pyramidentexte*, PT §921a, with different weapons. See Gardiner, *Grammar*, §22, §23 on determinatives.

apparent Wepwawet figure in "Group IV" might also serve as a determinative (Appendix, Figures 18, 42). ¹⁵²A ritual vessel also sometimes functions as the determinative for the "Following of Horus" as well; ¹⁵³ the ships in this scene could serve this function. The other determinative for the "Following of Horus" listed in the *Wörterbuch* der *Ägyptische Sprache* is a falcon (Gardiner G5); As no falcon is represented in the tableau except a possible, small one on the prow of the boat immediately beneath the procession, ¹⁵⁴ the figure of the king, conceived of as the incarnation of Horus in Dynastic times, may stand in for the falcon determinative. ¹⁵⁵

If the inscription observed on the Wadi Nag el-Hamdulab Site 7a tableau does indeed record taxation, it would demonstrate that this diagnostic feature of a state was in practice in the late Predynastic Period. Campagno cites coercion, of which taxes are a result, as a key, defining feature of a state, and Trigger sees taxes as equally important for the maintenance of the state in regard to caloric needs of the small elite population who do not, by definition, produce their own food. Writing would imply bureaucracy. 157

¹⁵² Sethe, *Pyramidentexte*, PT §1245c; PT §921a, with different weapons; DuQuesne, *The Jackal Divinities of Egypt I*, 116 in Darnell, "The Wadi of the Horus Qa'a," 1172-1173.

¹⁵³ See Wörterbuch der Ägyptische Sprache IV, 485; Kahl, Hieroglyphenschrift, 732; and DuQuesne, The Jackal Divinities of Egypt I, 413-414 in Darnell, "Hieroglyphic Annotation," 29.

¹⁵⁴ Hendrickx, Darnell, and Gatto, "The Earliest Representations of Royal Power," 1079.

¹⁵⁵ See Wörterbuch der Ägyptische Sprache IV, 485. Darnell, "Hieroglyphic Annotation," 29.

¹⁵⁶ Campagno, "Coercion, Creation, Intervention." Anđelković, "Commonwealth," 535. Trigger, *Early Civilizations*, 313

¹⁵⁷ Jiménez-Serrano, "Origin," 1127.

Chapter 4: Conclusion

Theories of State Formation

This thesis has examined in Part I the subject of state formation in the Predynastic Period of Egypt. I defined a state and provided a general overview of how states are thought to have developed in the ancient world. I then reviewed literature on hypotheses concerning how, where and when the Egyptian pristine state may have emerged. Overall, the theoretical reconstruction of Egyptian state formation shown by the literature is of the state developing from agricultural communities into chiefdoms that then developed into "proto-states" that then coalesced into one state in Upper Egypt that then spread to the Delta.

States are defined by the key elements of monopoly of the means of violence, territoriality, sovereignty, bureaucracy, authority, legitimacy, citizenship and taxation.¹ The state is thought to have been present in Nagada IIIA1 by virtue of the carved symbols found in Tomb U-j, which have been interpreted by Regulski as being an ancestor to the later, codified writing system in Dynastic times;² writing implies bureaucracy, a diagnostic feature of a state.³ State formation in Egypt has been separated into five distinct stages by Anđelković, starting at "protonomes," developing into nome pre-states, then the Upper Egyptian Commonwealth, next the "All-Egyptian Early State" and reaching a final stage in the "Established State."⁴

¹ Anđelković, "Commonwealth," 535.

² Hendrickx, "Relative Chronology," cited in Dreyer et al., *Umm el-Qaab I*, 40. Regulski, "Origin," 997.

³ Jiménez-Serrano, "Unification," 1127.

⁴ Anđelković, "Commonwealth."

Different factors for initiating, and then driving, state formation have been proposed such as Anđelković's "will to power" and Gat's "power politics." Gat holds that polities have an inherent nature to expand and merge with smaller or less powerful political entities. Human nature compels individuals to attempt to acquire resources without cost according to the concept of "negative reciprocity."

The bureaucracy instituted a perhaps conscious systematization of the writing system as well as the royal art, both in regard to form, composition and content.⁸ This may have minimized the impact of Kemp's so-called "Preformal" culture, which featured an artistic repertoire different from that of the state.⁹ Codification of the writing system seems to have been completed by Dynasty 3,¹⁰ but neither the writing system nor the art canon remained static throughout Egyptian history.¹¹

The development of Upper Egypt's nome pre-states into the Upper Egyptian

Commonwealth can be understood through game theory, part of which is the "knock-on

effect." Kinship is thought by Campagno and Trigger to have impeded the development of the

⁵ Anđelković, "Commonwealth" and Gat, "Rural Petty State."

⁶ Gat, "Rural Petty State."

⁷ Maisels, *Politics and Power*, 352.

⁸ Kemp, *Anatomy*, (2nd ed.) in Regulski, "Origin," 999.

⁹ Kemp, *Anatomy*, (2nd ed.), 112 in Regulski, "Origin," 998. See also J. Capart, *Primitive art in Egypt* (London, 1905).

¹⁰ J. Kahl, *Hieroglyphenschrift in der 0-3 Dynastie*, 161-163 in Regulski, "Origin," 999.

¹¹ Regulski, "Origin," 999; Kemp, *Anatomy*, 134. See Schäfer, *Principles*, for the rules governing the codified royal art canon in Dynastic times. Styles and proportions did change over time within the Dynastic Era, however: See Smith and Simpson, *Art and Architecture* and Robins, *Proportion and Style*.

¹² Kemp, *Anatomy*, (2nd ed.), 74.

state by making coercion, mainly through taxation, impossible due to the "moral norm of reciprocity."¹³ There is disagreement about if the competition between the "proto-states" was violent and organized to the point of warfare, as art from the period of state formation shows interpersonal violence, yet there is no archaeological evidence for warfare at that time.

During the late Nagada II Period during Anđelković's stage of the "Upper Egyptian Commonwealth," Upper Egyptian material culture appeared in the Delta due to a theoretical phenomenon termed the "Nagada Expansion." The prevailing view was that this change in the Delta region occurred by means of conquest, ¹⁴ however, Köhler has questioned the validity of this theory due to lack of archaeological evidence for either a violent conquest or mass migration of people from Upper Egypt into the Delta region. ¹⁵ The archeological data from the Delta, namely ceramic technology and forms, has been interpreted by Köhler as showing not only copying of Upper Egyptian material culture and technology but also local adaptation and mixing of the two regional traditions. ¹⁶ The work of Keita examining craniofacial similarity between Northern and Southern sites during the time of the Nagada Expansion does not support a large movement of people to the Delta region but, on the contrary, small-scale movement in both directions. ¹⁷

¹³ Campagno, "War," 692.

¹⁴ Baines, J., "Origins of Egyptian Kingship," in *Ancient Egyptian Kingship*, eds. D. O'Connor and D. Silverman (Leiden: Brill, 1995), 102.

¹⁵ Köhler, "Culture Wars," in Mączyńska, "Shaky Foundations," 95.

¹⁶ Mączyńska, "Shaky Foundations," 96.

¹⁷ S. O. Y. Keita, "Mass Population Migration vs. Cultural Diffusion in Relationship to the Spread of Aspects of Southern Culture to Northern Egypt during the Latest Predynastic: A Bioanthropological Approach," in *Egypt at its Origins 6*, eds., E. Christiana Köhler, Nora Kuch, Friederike Junge, and Ann-Kathrin Jeske, 95-110. (Leuven; Paris; Bristol, CT: Peeters, 2021).

Rock Art Tableaux

In Part II of this thesis, I used these theories of state formation as a framework with which to understand rock art tableaux dated stylistically to the latter period of state formation, which is the Late Predynastic Period. I showed how the three rock art sites seem to visually demonstrate some of the diagnostic features of a state. After dating stylistically two other rock art tableaux to the Late Predynastic Period, I assigned them to one of Anđelković's five hypothesized stages of Egyptian state formation. I then evaluated whether his description of the Egyptian state at that phase is congruent with the content and iconography within the scene.

All three rupestrian sites showed diagnostic criteria for a state in their scenes. Gebel Tjauti "Inscription 1" shows monopoly on violence and possible writing. The Gebel Sheikh Suleiman Major Tableau also seems to show writing as well as violence in the state formation process, specifically the nature of the relationships between the postulated three Upper Egyptian "proto-states." Wadi Nag el-Hamdulab Site 7a seems to demonstrate the beginning of artistic codification with some pre-codification elements such as dogs being linked to status and power still being shown. Wadi Nag el-Hamdulab Site 7a may show coercion, specifically taxation, represented in early writing. Writing implies bureaucracy, a defining feature of a state.

The criteria I used for stylistic dating, which have been discovered by various scholars, included the shape and posture of falcons, presence and style of serekhs, the style of human figures, the presence of scorpions as an apparent symbol of elevated social status, the presence of the bovine-head-on-a-stick motif, the presence of writing, boat form, and white crown form. Anđelković differentiates his five stages through the presence of the following factors: the

¹⁸ This is contingent upon the alleged carving of the alleged royal name of <u>D</u>r and the falcon being later additions to the main scene.

growing wealth gap, the presence of a supreme ruler, competition between polities, bureaucracy, territorial expansion and unity in regard to economy, politics, and the mortuary realm. I attempted to identify the presence of a supreme ruler through the presence of the following: iconography that seems to communicate elevated social status such as the bovine-head-on-a-stick motif, scorpions, serekhs, and human figures that feature hierarchical scale or wield scepters/maces or are accompanied by dogs or wear crowns or are smiting. I identified bureaucracy through the presence of writing, which implies bureaucracy. Anđelković states that territory of the Egyptian state expanded over his stages, most notably to the Delta, and so I try to identify indicators of that as well such as foreign toponyms.

Anđelković dated Gebel Tjauti "Inscription 1" to his phase of the "All-Egyptian Early State" (Nagada IID2-IIIB/C1 Periods). ¹⁹ Based on style and content, I have dated the Gebel Sheikh Suleiman Major Tableau and Wadi Nag el-Birka Site 7a to Dynasty 0 (the Nagada IID2-IIIB/C1 Periods (ca. 3450 - 3150 BCE)), which falls within Anđelković's phase of the "All-Egyptian Early State" (Nagada IID2-IIIB/C1 Periods) (Appendix, Tables 1, 8). ²⁰ My dating of the Gebel Sheikh Suleiman tableau to the Late Predynastic Period is possible based on stylistic analysis but is not in accord with previous analyses. ²¹ During his phase of the "All-Egyptian Early State," Anđelković describes the Egyptian state as "highly centralized and internally specialized" with a king at its head. ²² Anđelković characterizes the Egyptian state at this stage as

¹⁹ See Anđelković, "Commonwealth," 540-541.

²⁰ See Anđelković, "Commonwealth," 540-541.

²¹ See Arkell, "Varia Sudanica," 29 and Somaglino and Tallet, "Gebel Sheikh Suleiman."

²² Anđelković, "Commonwealth," 540.

unified in regard to the economy and politics of Egypt, having a well-developed bureaucracy, and comprising Upper and Lower Egypt under the rule of one king.

Elements in the Gebel Sheikh Suleiman Major Tableau and Wadi Nag el-Birka Site 7a find congruence with Anđelković's description of his phase of the "All-Egyptian Early State." Writing in both Gebel Sheikh Suleiman and Wadi Nag el-Birka Site 7a implies a bureaucracy, while the serekh in Gebel Sheikh Suleiman and the anthropomorphic figure of the king represented by the large, crowned figure holding possible scepters in Wadi Nag el-Birka Site 7a suggest a king. Therefore, my attributions of the Gebel Sheikh Suleiman and Wadi Nag el-Birka Site 7a to Anđelković's phase of the "All-Egyptian Early State," based on stylistic dating, are theoretically possible, because their iconography and content do not seem to contradict Anđelković's description of his phase of the "All-Egyptian Early State."

Suggestions for Further Research

I would suggest further research on state formation to focus on *ma'at*, especially in regard to its relationship to the unification of Upper and Lower Egypt. Campagno posited that *ma'at* may have catalyzed the unification of Upper and Lower Egypt.²³ Strong evidence is present for a *ma'at* concept existing in the Predynastic that was represented with some of the same iconography as in the Dynastic Period.²⁴ An in-depth study on the relationship between *ma'at* and the *beginnings* of pristine state formation in Egypt has yet to be conducted. No study currently exists devoted entirely to the iconography of *ma'at* as relates to the early beginnings of the development of elevated social status, which led, ultimately, to the formation of the pristine

²³ Campagno, "War," 702.

²⁴ See for example, Stan Hendrickx, "The dog, Lycaon pictus and order over chaos in Predynastic Egypt." in *Archaeology of Early Northeastern Africa. In Memory of Lech Krzyżaniak*, eds. K. Kroeper, M. Chłodnicki and M. Kobusiewicz (Poznań: Poznań Archaeological Museum, 2006).

Egyptian state. Such a study would necessarily utilize Late Predynastic and Dynastic-era sources to shed light on Early Predynastic conceptions of *ma'at* and its impact on decisions within the political sphere. With the new rock art tableaux and individual rupestrian figures that have been discovered in the last twenty years, there is certainly a catalog of art that could be utilized, in addition to the existing body of Predynastic objects, to produce a study with the aforementioned goal in mind.

Although de Wit has made a study of iconography of *ma'at* spanning the entire Predynastic Period, he focuses primarily on the political importance of *ma'at* at the end of state formation, that is, just before the beginning of the Dynastic Period. Huyge has examined *ma'at* in the early Predynastic through rock art but has not connected this evidence with the rise of elevated social status or the state in an explicit manner. Bestock has also examined the evidence for *ma'at* dating to all periods of the Predynastic but expresses serious doubt that any notions of order in opposition to chaos implied by Predynastic art were of the same nature as those in the Dynastic Period. The archaeological work of Friedman, Linseele, and van Neer has likewise produced a wealth of evidence for a *ma'at* ideology in the Predynastic Period at the sites of Hierakonpolis Locality 29A and Hierakonpolis Cemetery 6.²⁷

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²⁵ A. J. de Wit, *Enemies of the State: Perceptions of "Otherness" and State Formation in Egypt.* MA Thesis (Leiden University, 2008).

²⁶ Bestock, *Violence and Power*, Chapters 2 and 3.

²⁷ See for example: Veerle Linseele, Wim van Neer, and Renée Friedman, "Animal burials and food offerings at the elite cemetery HK6 of Hierakonpolis" in *Egypt at its Origins: Studies in Memory of Barbara Adams*, eds. Stan Hendrickx, Renée Friedman, K. Ciałowicz, and M. Chłodnicki (Leuven; Dudley, MA: Peeters, 2004) and Veerle Linseele, Wim van Neer, and Renée Friedman, "Special Animals from a Special Place? The Fauna from HK29A at Predynastic Hierakonpolis." *JARCE* 45 (2009). See also Anna Pieri, Renée Friedman, and Sean Dougherty, "Ritual Violence in Early Egypt: A View from Hierakonpolis," in *Ritual Violence - Rituals of Violence: Conference proceedings of the 12th Archaeological Conference of Central Germany*, eds. H. Meller, R. Roberto, K. W. Alt, F. Bertemes, and R. Micó, *Tagungen des Landesmuseums für Vorgeschichte Halle* 22, no. 1 (2020).

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Appendices

Tables

Table 1. Predynastic Chronology Table showing the Relative Cultural Sequences of the Predynastic Period in Upper Egypt. After S. Hendrickx, "Predynastic to Early Dynastic Chronology" Chapter II.1 in *Handbook of Oriental Studies. Section One. The Near and Middle East* 83, edited by Erik Hornung, R. Krauss and R. Warburton, 54-93. (Leiden, 2006), 92, Table II, 1.7.

	cal. BC
Naqada IIID	from ca. 2920 onwards
Naqada IIIC2	ca. 3000-2920
Naqada IIIC1	ca. 3150-3100
Naqada IIIB	
Naqada IIIA2	ca. 3350-3150
Naqada IIIA1	
Naqada IIC–IID2	ca. 3600-3350
Naqada IA–IIB	ca. 4000/3900-3600

Table 2. Nagada IIIA1-IIID and the corresponding king or postulated ruler. After S. Hendrickx, "Predynastic to Early Dynastic Chronology" Chapter II.1 in *Handbook of Oriental Studies*. *Section One. The Near and Middle East* 83, edited by Erik Hornung, R. Krauss and R. Warburton, 54-93. (Leiden, 2006), 89, Table II. 1.6.

King	Naqada	Abydos	Saqqara	Tarkhan	Turah
Qa-a	IIID	Q	S 3120, S 3121,		
G 11	HIGO (D	**	S 3500, S 3505	_	_
Semerkhet	IIIC2/D	U	-	_	_
Adjib	IIIC2	X	S 3038, S 3111,		
			S 3338	_	_
Den	IIIC2	T	S 3035, S 3506,		
			S 3507, S X	-	_
	IIIC1/2	_	S 3036	_	_
Djed	IIIC2	Z	S 3504	1060	_
Djer	IIIC1	O	S 3471, S 3503	_	235
Hor-Aha / Djer	IIIC1/2	_	_	300	_
Hor-Aha	IIIC1	B 10/15/19	S 3357	_	_
Narmer	IIIC2	_	_	1982	_
11011101	IIIC1	B 17/18 (?)	_	414, 415, 1100	_
Ka	IIIC1	_	_	261	_
110	IIIB/C1	_	_	201	1627, 1651
	IIIB	B 7/9	_	_	_
Irj-Hor	IIIB	B 1/2	_	_	_
	IIIB		_	1702	54, 64, 89
	шь	U-t, U-x, U-y, U-z		1702	34, 64, 69
	TITAO				
_	IIIA2	U-g, U-h, U-s,	_	_	_
	***	U-u, U-v			
Scorpion I	IIIA1	U-j	_	_	_
_	IIIA1	U-a, U-k, U-o,	_	_	_
		U-r, U-qq			

Table 3. Kaiser's Pre Dynastic Chronology and the corresponding sequences in Hendrickx's chronology. After S. Hendrickx, "Predynastic to Early Dynastic Chronology" Chapter II.1 in *Handbook of Oriental Studies. Section One. The Near and Middle East* 83, edited by Erik Hornung, R. Krauss and R. Warburton, 54-93. (Leiden, 2006), 85, Table II. 1.5.

Kaiser 1957, 1990	Stufe	Hendrickx 1989, 1996	Naqada
- 50 t 50 d 48 s-t, 49 d, 50 d 48 s-t, 49 d/l 47 W 50-51 a, 55, 56 g, 61-62 - W 41, 43 b, 47 g W 41, 43 b, 47 g W 24, 25 W 3, 19	- IIIc3 IIIc2 IIIc1 IIIb2 IIIb1 IIIa2 - IIIa1 IId2 IId1 IIc	no cylindrical jars 50 b-c / h-t 50 d-g - 47 r-t, 48 s, 49 d/g W 55, 58, 60-62 W 49-51, 56 a/g - W 41-42, 43 b, 47 a/g/m W 24-25, 27 W 3, 19	IIID IIIC2 IIIC1 - IIIB IIIA2 IIIA1 - IID2 IID1 IIC

Table 4. Chronology Table encompassing the Paleolithic through Dynasty 8. After E. Köhler, "The Development of Social Complexity in Early Egypt. A View From the Perspective of the Settlements and Material Culture of The Nile Valley" *Egypt and the Levant* 27 (2017), 349, Table 1.

Absolute chronology (in years BCE)	Historical chronology		Relative chronology
2700–2100		Old Kingdom (Dynasties 3–8)	
2700 3100	Early Bronze Age	Early Dynastic (Dynasties 1–2)	Naqada IIIC-D
3300	1	Proto-Dynastic	Naqada IIIA-B
3500	Late Chalcolithic		Naqada IIC/D – IIIA
3800	Early Chalcolithic		Naqada IB/C-IIB
4400	Late Neolithic		Naqada IA/B Badarian
5300	Early Neolithic		El-Omari Merimde Benisalame Fayum A
7000	Epi-Palaeolithic		
10 000 300 000	Palaeolithic		

Table 5. Chronology Table showing the Various Cultural Sequences of the Upper Egyptian Nile Valley, the Delta and Nubia during the Predynastic Period. After Wengrow, David. *The Archaeology of Early Egypt*. (Cambridge University Press, 2006), 273, Table 2.

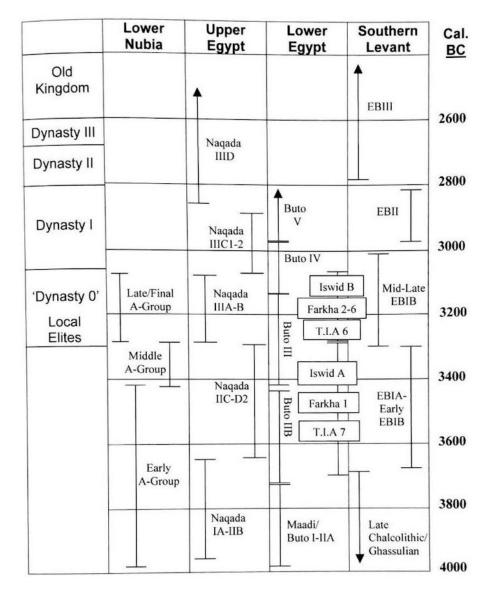


Table 6. Succession of rulers (?) of the Late Predynastic Period postulated by Kahl. After Kahl, "Die frühen Schriftzeugnisse aus dem Grab U-j in Umm el-Qaab" *Chronique d'Egypte* 78 (2003), 116, fig. 2. Listed in ascending chronological order. Translated by the present author.

Oryx (?) standard		
Pteroceras shell		
Fish (?)		
Elephant		
Bull (= Horned bovine head standard?)		
Stork		
Canid		
Horned bovine head standard		
Scorpion I		
Falcon I		
Min Standard and botanical element		
?		
?Falcon II		
Lion		
Double Falcon		
Iri-Hor		
Sechen/Ka		
Scorpion II		
Narmer		

Table 7. Maisels' Model of the Development of Egyptian Civilization. After Charles Maisels, *The Archeology of Politics and Power: Where, When, and Why the First States Formed.* (Oxford; Philadelphia: Oxbow Books, 2010), 157-158, fig. 5.12. Summarized by the present author.

Stage of Development	Characteristics
Farming villages	Internal stratification
Agricultural towns	Compete with other agricultural town for control of rural villages
Fortified towns	Rulers (chiefs)
Regional capitals	Nagada, Hierakonpolis, Abydos, and Abadiya
Unification in the South	Hierakonpolis allies with Abydos (Nagada has already merged with Hierakonpolis)
Unification of the 'Two Lands'	Spread of Nagada Culture to Delta

Table 8. Anđelković's Developmental Phases of the Egyptian "Pristine State". After Branislav, Anđelković "The Upper Egyptian Commonwealth: A Crucial Phase of the State Formation Process." In *Egypt at its Origins: Studies in Memory of Barbara Adams: proceedings of the international conference "Origin of the State, Predynastic and Early Dynastic Egypt,"* Krakow, 28 August - 1st September 2002, edited by Stan Hendrickx, Renée Friedman, K Ciałowicz, and M Chłodnicki. Orientalia Lovaniensia Analecta 138. (Leuven; Dudley, MA: Peeters. 2004), 535-541. Anđelković's fifth stage, his so-called "Egyptian Empire," has been changed to "Established State" by the present author for reasons outlined in the main text.

Phase	Cultural Sequence
Proto-nomes	the Nagada IA-B periods
Nome Pre-States	the Nagada IC-IIB periods
Upper Egyptian Commonwealth	the Nagada IIC-D1 periods
All-Egyptian Early State	the Nagada IID2-IIIB/C1 periods ("Dynasty 0")
Established State	the Nagada IIIC1/2 periods (beginning in Dynasty 1)

Figures



Figure 1. The Narmer Palette, recto and verso. JE 32169, CG 14716. Late Dynasty 0, ca. Nagada IIIC2. Carved siltstone.

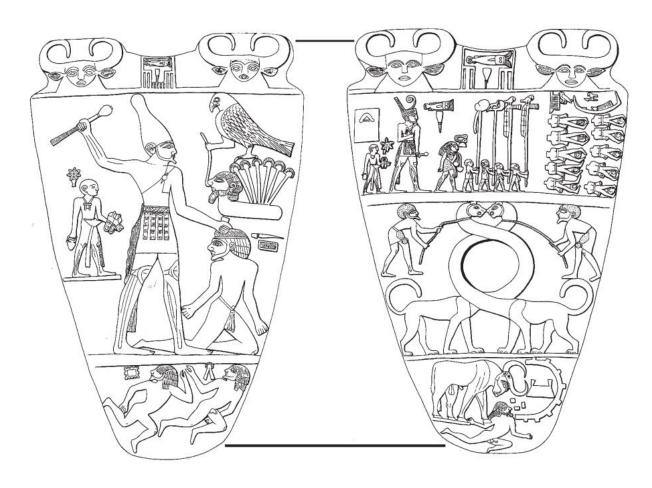


Figure 2. The Narmer Palette, line drawing. recto and verso. JE 32169, CG 14716. Late Dynasty 0, ca. Nagada IIIC2. Carved siltstone. After Ellen Morris, "(Un)dying Loyalty: Meditations on Retainer Sacrifice in Ancient Egypt and Elsewhere," in *Violence and Civilization Studies of Social Violence in History and Prehistory*, ed. Roderick Campbell (Oxford; Oakville, CT: Oxbow, 2014), 64, fig. 3.1. Originally by Barry Kemp, *Ancient Egypt: Anatomy of a Civilization*, (London; New York: Routledge, 2006), 84, fig. 27.

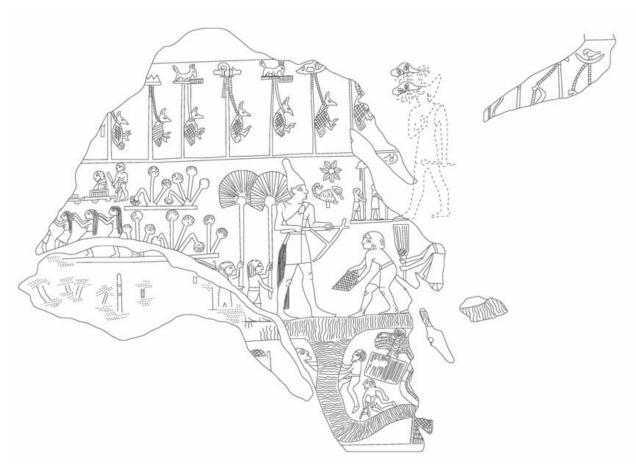


Figure 3. Scorpion Macehead, line drawing. Dynasty 0, ca. Nagada IIIC1. After B. Adams and K. M. Ciałowicz, *Protodynastic Egypt*. (Buckinghamshire: Shire Publications, 1997), 8, fig. 1. Drawing by K.M. Ciałowicz.

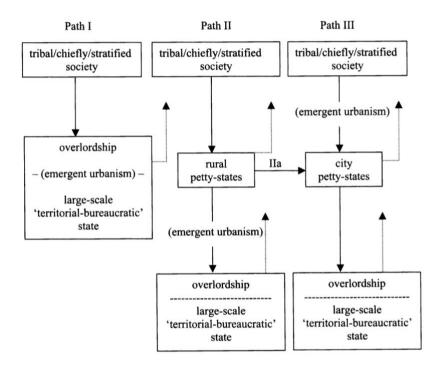


Figure 4. Gat's Model Showing the Various Evolutionary Paths to Statehood. after A. Gat, "Rural Petty-State and Overlordship: Missing Links in the Evolution of the Early State." *Anthropos* 98 (2003), 136, Fig. 1.

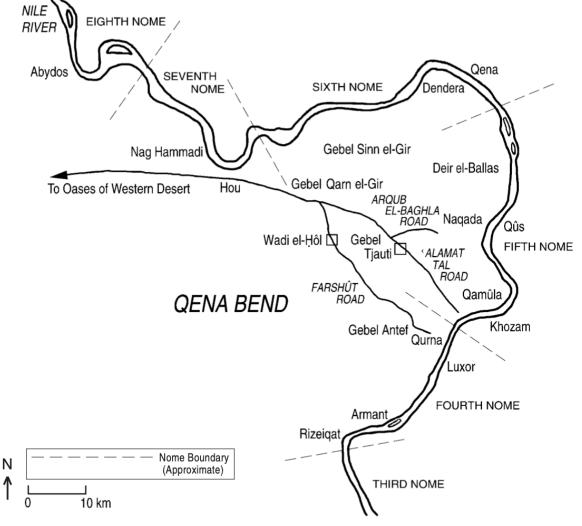


Figure 5. Map showing the Location of Gebel Tjauti. After John C. Darnell, Deborah Darnell, Renée Friedman, and Stan Hendrickx. *Theban Desert Road Survey in the Egyptian Western Desert Vol. 1: Gebel Tjauti Rock Inscriptions 1-45 and Wadi el-Hol Rock Inscriptions 1-45.* University of Chicago Oriental Institute Publications 119. (Chicago: University of Chicago Press, 2002), 4, fig. 1a.



Figure 6. Gebel Tjauti "Inscription 1," line drawing. After John C. Darnell, Deborah Darnell, Renée Friedman, and Stan Hendrickx. *Theban Desert Road Survey in the Egyptian Western Desert Vol. 1: Gebel Tjauti Rock Inscriptions 1-45 and Wadi el-Hol Rock Inscriptions 1-45.* University of Chicago Oriental Institute Publications 119. (Chicago: University of Chicago Press, 2002), plate 11.

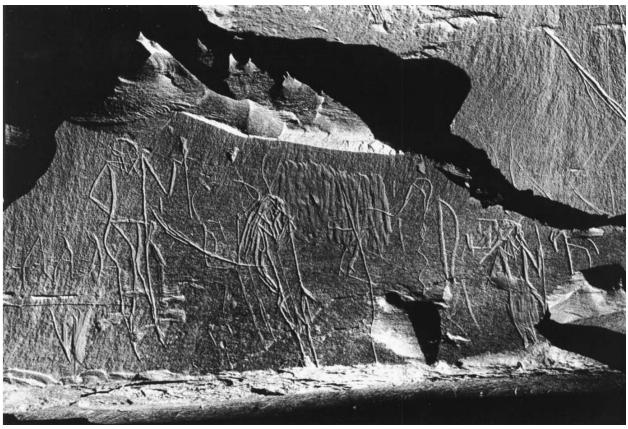


Figure 7. Gebel Tjauti "Inscription 1," photograph, detail of lower "register." After John C. Darnell, Deborah Darnell, Renée Friedman, and Stan Hendrickx. *Theban Desert Road Survey in the Egyptian Western Desert Vol. 1: Gebel Tjauti Rock Inscriptions 1-45 and Wadi el-Hol Rock Inscriptions 1-45.* University of Chicago Oriental Institute Publications 119. (Chicago: University of Chicago Press, 2002), plate 9b.



Figure 8. Drawing of Tag X183 from Tomb U-j, reconstruction line drawing. British Museum 35516. After G. Dreyer et al, *Umm el-Qaab I: Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse*. Deutsches Archäologisches Institut, Abteilung. Kairo, Archäologische Veröffentlichungen 86. (Mainz: Philipp von Zabern, 1998), 135, Fig. 82.



Figure 9. Tag 51 from Tomb U-j, line drawing. After G. Dreyer et al., *Umm el-Qaab I: Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse*. Deutsches Archäologisches Institut, Abteilung Kairo, Archäologische Veröffentlichungen 86. (Mainz, 1998), 119, Fig. 76.



Figure 10. Dreyer's "MenschenGruppe" with the corresponding tag numbers. After G. Dreyer et al., *Umm el-Qaab I: Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse*. Deutsches Archäologisches Institut, Abteilung. Kairo, Archäologische Veröffentlichungen 86. (Mainz, 1998), 183.

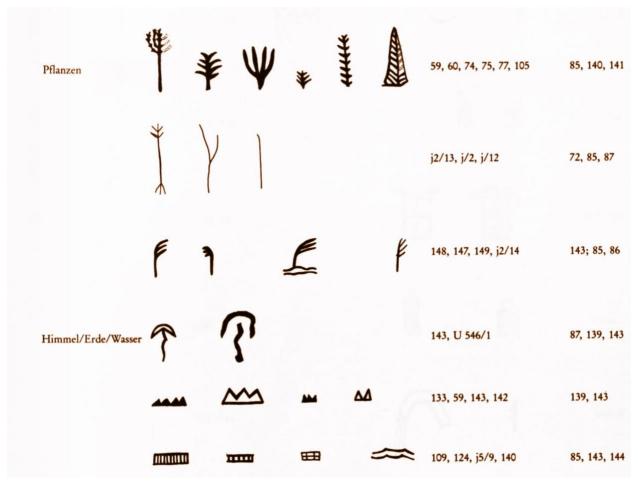


Figure 11. Dreyer's Tomb U-j groups: Plants; Sky/Earth/Water. After Dreyer et al., *Umm el-Qaab I: Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse*. Deutsches Archäologisches Institut, Abteilung Kairo, Archäologische Veröffentlichungen 86. Mainz, 1998), 185.



Figure 12. Wadi Nag el-Birka, figure wearing appurtenance at waist, line drawing. After John C. Darnell, "The Wadi of the Horus Qa'a: a Tableau of Royal Ritual Power in the Theban Western Desert," in *Egypt at its Origins 3, Proceedings of the International Conference "Origin of the State. Predynastic and Early Dynastic Egypt", London, 27th July - 1st August 2008*, eds. Renée Friedman and P. N. Fiske. Orientalia Lovaniensia Analecta 205. (Leuven; Paris; Walpole, MA: Peeters, 2011), 1180, fig. 15.

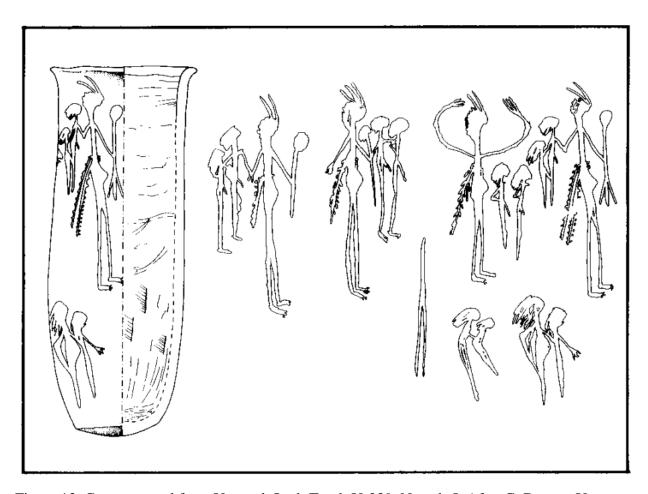


Figure 13. C-ware vessel from Umm el-Qaab Tomb U-239. Nagada I. After G. Dreyer, U. Hartung, T. Hikade, E.C. Köhler, Y. Müller and F. Pumpenmeier, *Umm el-Qaab*. *Nachuntersuchungen im fruhzeitlichen Konigsfriedhof 9./10. Vorbericht*. Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo 54 (1998), figs. 12:1 and 13 in Yosef Garfinkel, "Dancing or Fighting? A Recently Discovered Predynastic Scene from Abydos, Egypt," *Cambridge Archaeological Journal* 11 (2001), 244, fig. 3.

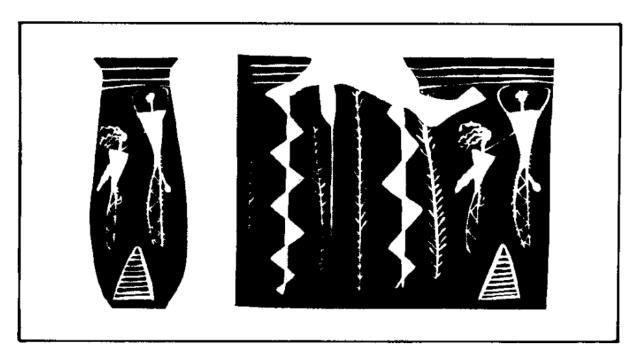


Figure 14. C-ware vessel, unknown provenance, London UC15339. Nagada I. After W. M. F. Petrie, *Prehistoric Egypt* (1920), pl. XVIII.74 in Yosef Garfinkel, "Dancing or Fighting? A Recently Discovered Predynastic Scene from Abydos, Egypt," *Cambridge Archaeological Journal* 11 (2001), 242, fig. 1.

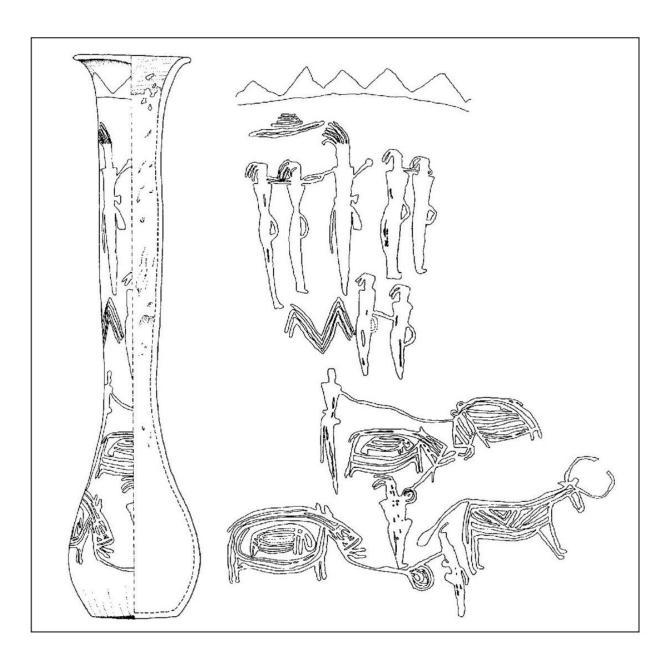


Figure 15. C-ware vessel from Umm el-Qaab Tomb U-415. Nagada I. After G. Dreyer, R. Hartmann, U. Hartung, T. Hikade, H. Köpp, C. Lacher, V. Müller, A. Nerlich, and A. Zink, *Umm el-Qaab: Nachuntersuchungen im frühzeitlichen Königsfriedhof*, Mittelungen des Deutschen Archäologischen Instituts abteilung Kairo 59 (2003), 80 in Augusto Gayubas, "Warfare and Socio-Political Hierarchies: Reflections On Non-State Societies of the Predynastic Nile Valley, *Gladius* 35 (2015), 12, fig. 4.

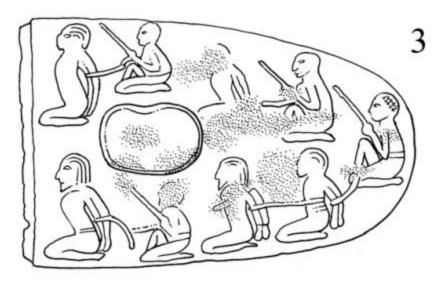


Figure 16. Oxford Knife Handle, line drawing. Ashmolean E4975. Carved ivory. Nagada II. After H. Whitehouse, "A Decorated Knife Handle from the 'Main Deposit' at Hierakonpolis" *MDAIK* 54 (2002) from F. Raffaele, "Animal Rows and Ceremonial Processions in Late Predynastic Egypt." In Recent Discoveries and Latest Researches in Egyptology: Proceedings of the First Neapolitan Congress of Egyptology (Naples, 18th–20th June 2008), edited by Francesco Raffaele, Massimiliano Nuzzolo, and Ilaria Incordino (Wiesbaden: Harrassowitz, 2010), 282, fig. 2.3.

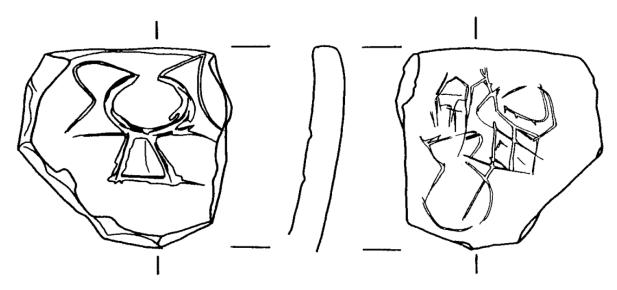


Figure 17. Incised sherd from Hierakonpolis Locality 29A, wall trench area 150L40 Locus 263 (HK29A MC 02-159) (h. 5.4 cm). After S. Hendrickx and Renée Friedman, "Gebel Tjauti rock inscription 1 and the relationship between Abydos and Hierakonpolis during the early Naqada III period," *Göttinger Miszellen* 196 (2003), 98, fig. 2.

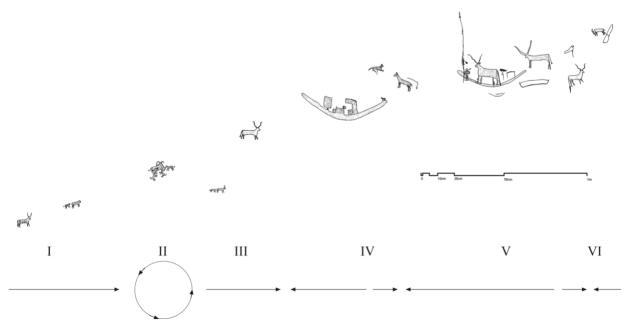


Figure 18. Wadi of the Horus Qa'a "Great Tableau," line drawing with the six "Groups" labeled. After John C. Darnell, "The Wadi of the Horus Qa'a: a Tableau of Royal Ritual Power in the Theban Western Desert," in *Egypt at its Origins 3, Proceedings of the International Conference* "Origin of the State. Predynastic and Early Dynastic Egypt", London, 27th July - 1st August 2008, eds. Renée Friedman and P. N. Fiske. Orientalia Lovaniensia Analecta 205. (Leuven; Paris; Walpole, MA: Peeters, 2011), 1164, fig. 8.

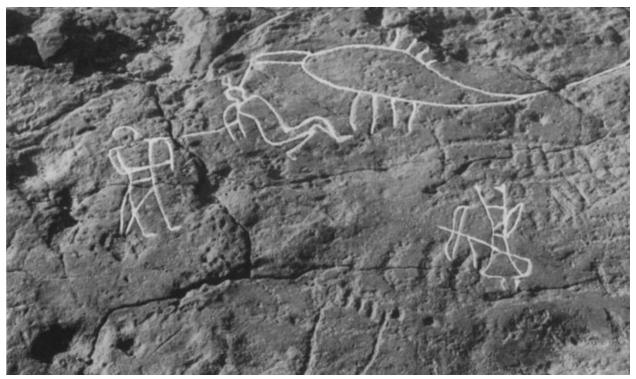


Figure 19. Gebel Sheikh Suleiman "Minor" Scorpion Tableau, photograph. Relevant figures have been chalked in white. After W. Needler, "A Rock-Drawing on Gebel Sheikh Suliman (near Wadi Halfa) showing a Scorpion and Human Figures." *JARCE* 6 (1967), fig. 3. Photograph and outlining of figures in white by Needler.

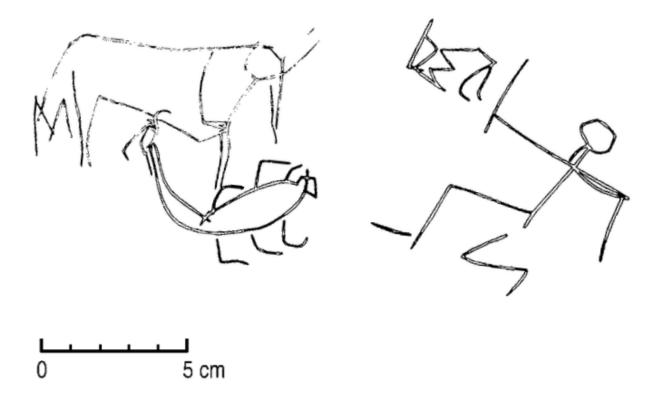


Figure 20. Gebel Tjauti "Inscription 28," line drawing. Predynastic Period. After John C. Darnell, Deborah Darnell, Renée Friedman, and Stan Hendrickx. *Theban Desert Road Survey in the Egyptian Western Desert Vol. 1: Gebel Tjauti Rock Inscriptions 1-45 and Wadi el-Hol Rock Inscriptions 1-45*. University of Chicago Oriental Institute Publications 119. (Chicago: University of Chicago Press, 2002), Plate 17c.

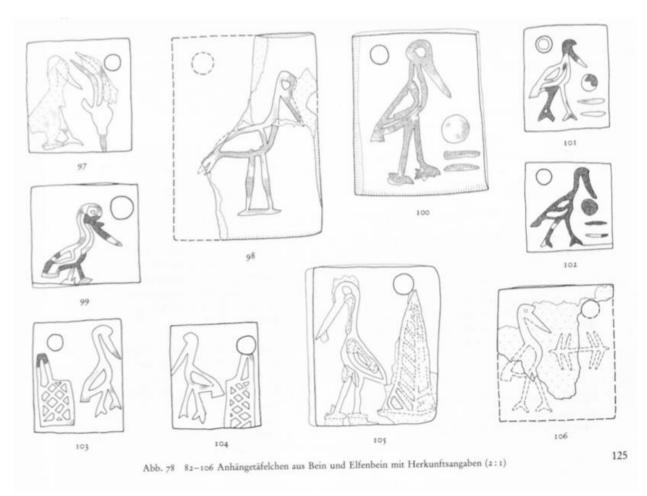


Figure 21. Tomb U-j tags 98, 100-105, line drawings. After G. Dreyer et al., *Umm el-Qaab I: Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse*. Deutsches Archäologisches Institut, Abteilung. Kairo, Archäologische Veröffentlichungen 86. (Mainz, 1998), 105, fig. 78

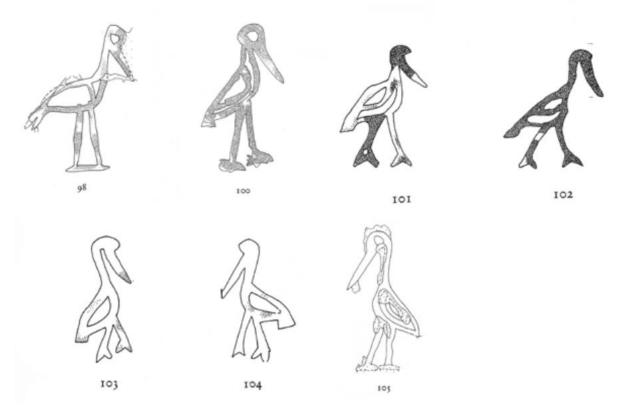


Figure 22. Tomb U-j tags 98, 100-105, bird elements isolated, line drawings. After John C. Darnell, "The Early Hieroglyphic Inscription at el-Khawy" *Archaéo-Nil* 27 (2017), 54, fig. 8. Images taken from G. Dreyer et al., *Umm el-Qaab I: Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse*. Deutsches Archäologisches Institut, Abteilung Kairo, Archäologische Veröffentlichungen 86. Mainz, 1998), 125, fig. 78.

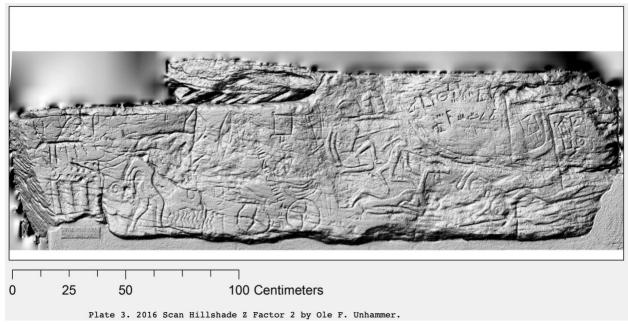


Figure 23. Scan of the Gebel Sheikh Suleiman Major Tableau, by Ole F. Unhammer. After B. B. Williams, Cornelia Kleinitz, Nadeya Reshetnikova, and Ole Unhammer, "The Gebel Sheikh Suleiman Monument," (2017), pl. 3.

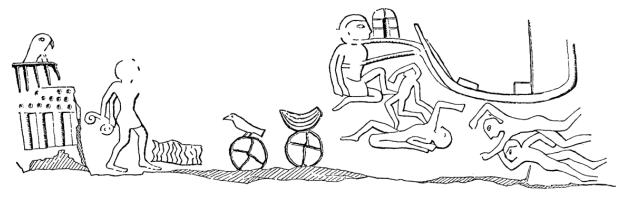


Fig. 1. Relief of King Djer at Gebel Shēkh Suliman.

Figure 24. Arkell's line drawing of the Gebel Tjauti tableau. After A. J. Arkell, "Varia Sudanica," *JEA* 36 (1950), 28, fig. 1. Graffiti from later periods has been omitted.



Figure 25. Murnane's line drawing of the Gebel Sheikh Suleiman Major Tableau. After W. J. Murnane, "The Gebel Sheikh Suleiman Monument: Epigraphic Remarks" Appendix C in *The Metropolitan Museum Knife Handle and Aspects of Pharaonic Imagery before Narmer*, Bruce Beyer Williams and T. J. Logan. *JNES* 46, no. 4 (1987), 285, figs. 1A, B. Image prepared by Somaglino and Tallet: After Claire Somaglino and Pierre Tallet, "Gebel Sheikh Suleiman: A First Dynasty Relief After All...," *Archéo-Nil* 25 (2015), 124, fig. 4B.

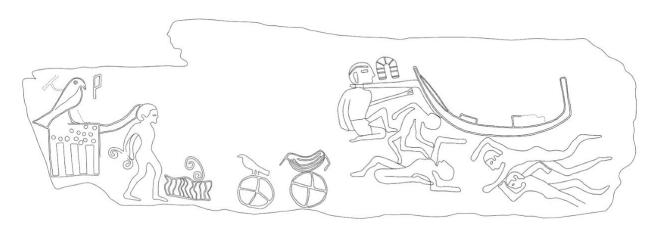


Figure 26. Somaglino and Tallet's Line drawing of the Gebel Sheikh Suleiman Major Tableau. After Claire Somaglino and Pierre Tallet, "Gebel Sheikh Suleiman: A First Dynasty Relief After All...," *Archéo-Nil* 25 (2015), 125, fig. 5. Khartoum Museum.

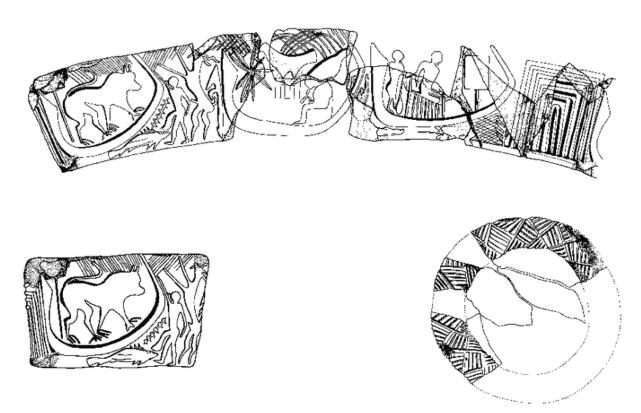


Figure 27. Qustul Incense Burner, line drawing. From Qustul Tomb L24, Chicago Oriental Institute Museum 24069. After B. B. Williams, *Excavations between Abu Simbel and the Sudan frontier, Part 1: The A-Group royal cemetery at Qustul: Cemetery L.* Oriental Institute Nubian Expedition 3. (Chicago: Chicago University Press, 1986), pl. 34.

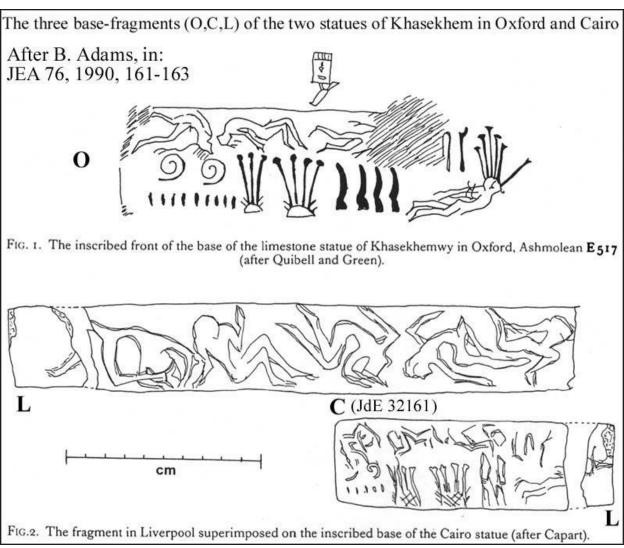


Figure 28. Carvings on bases of two statues of Khasekhemwy, line drawings (Cairo JE 32161 and Oxford, Ashmolean E 517). Late Second Dynasty. After Barbara Adams, "A fragment from the Cairo statue of Khasekhemwy," *JEA* 76 (1990), fig. 2.



Figure 29. Gebel Arak knife handle, line drawing. Louvre E 11517. Carved ivory. Nagada II. After U. Sievertsen, "Das Messer vom Gebel el-Arak," *Baghdader Mitteilungen* 23 (1992) from F. Raffaele, "Animal Rows and Ceremonial Processions in Late Predynastic Egypt." In Recent Discoveries and Latest Researches in Egyptology: Proceedings of the First Neapolitan Congress of Egyptology (Naples, 18th–20th June 2008), edited by Francesco Raffaele, Massimiliano Nuzzolo, and Ilaria Incordino (Wiesbaden: Harrassowitz, 2010), 282, fig. 2.1.



Figure 30. Gebel Arak knife handle, line drawing, Detail of figure holding the element that Williams interpreted as a coiled rope. Louvre E 11517. Carved ivory. Nagada II. After U. Sievertsen, "Das Messer vom Gebel el-Arak," *Baghdader Mitteilungen* 23 (1992) from F. Raffaele, "Animal Rows and Ceremonial Processions in Late Predynastic Egypt." In Recent Discoveries and Latest Researches in Egyptology: Proceedings of the First Neapolitan Congress of Egyptology (Naples, 18th–20th June 2008), edited by Francesco Raffaele, Massimiliano Nuzzolo, and Ilaria Incordino (Wiesbaden: Harrassowitz, 2010), 282, fig. 2.1.



Figure 31. Gebel Arak knife handle, Louvre E 11517. Detail photograph showing the figure holding the element that Williams interpreted as a coiled rope.

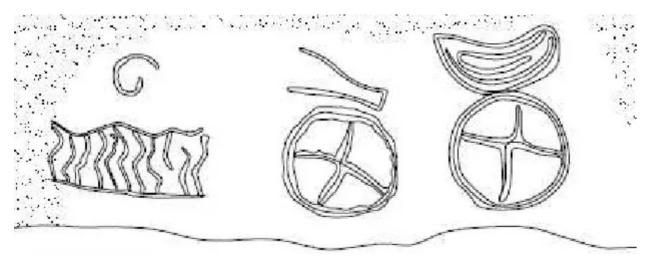


Figure 32. Gebel Sheikh Suleiman, Williams' reading of the center of the composition. After B. B. Williams, Cornelia Kleinitz, Nadeya Reshetnikova, and Ole Unhammer, "The Gebel Sheikh Suleiman Monument," (2017), 24, fig. 17.

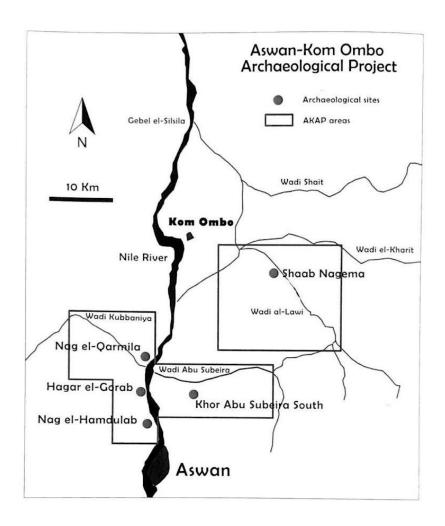


Figure 33. Map showing the Location of Wadi Nag el-Hamdulab. After Alberto Urcia and Antonio Curci, "Digital Documentation and three-dimensional Reconstruction of Predynastic-Early Dynastic Rock art in Aswan (Egypt)," in *Egypt at its Origins 4: Proceedings of the Fourth International Conference "Origin of the State, Predynastic and Early Dynastic Egypt," New York, 26th-30th July 2011*, ed. Matthew Douglas Adams with the collaboration of Béatrix Midant-Reynes, Ellen M. Ryan, and Y. Tristant (Leuven: Peeters, 2016), 412, fig. 1.

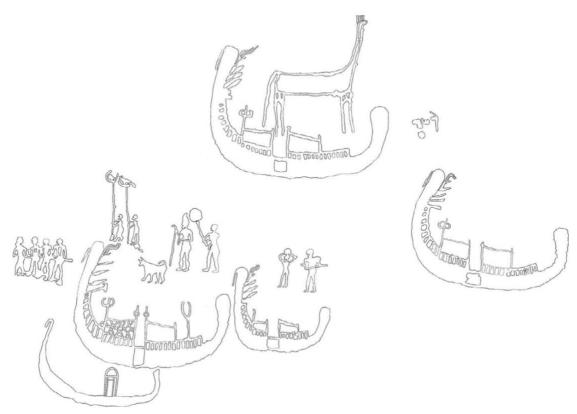


Figure 34. Wadi Nag el-Hamdulab site 7a, line drawing. After Hendrickx, Darnell, and Gatto, "The earliest representations of royal power in Egypt: the rock drawings of Nag el-Hamdulab (Aswan)," *Antiquity* 86 (2012), 1078, fig. 11.



Figure 35. Wadi Nag el-Hamdulab site 7a, detail. After Hendrickx, Darnell, and Gatto, "The earliest representations of royal power in Egypt: the rock drawings of Nag el-Hamdulab (Aswan)," *Antiquity* 86 (2012), 1078, fig. 11.



Figure 36. Wadi Nag el-Hamdulab site 7a, detail. After Hendrickx, Darnell, and Gatto, "The earliest representations of royal power in Egypt: the rock drawings of Nag el-Hamdulab (Aswan)," *Antiquity* 86 (2012), 1070, fig. 2. Photograph by Dieter Johannes. Labib Habachi Photographic Archives.



Figure 37. Scepter from Tomb U-j, photograph. carved elephant ivory. After G. Dreyer et al., *Umm el-Qaab I: Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse*. Deutsches Archäologisches Institut, Abteilung Kairo, Archäologische Veröffentlichungen 86. (Mainz, 1998), Table 36-200.

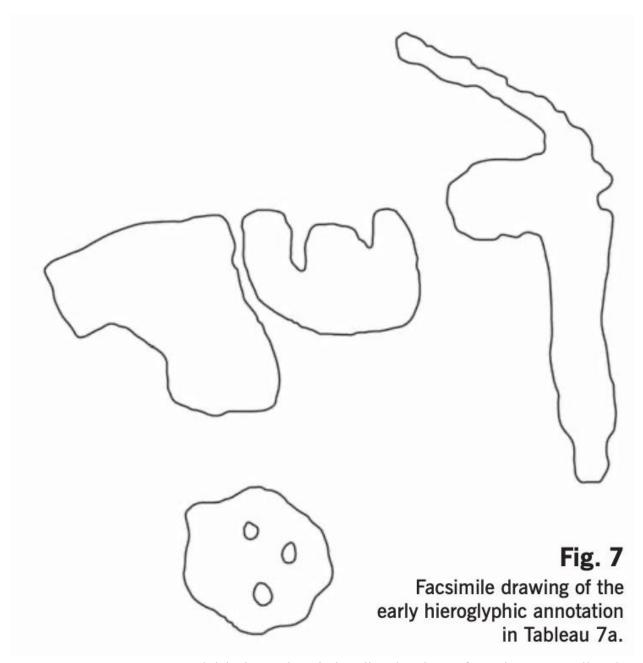


Figure 38. Wadi Nag el-Hamdulab site 7a, inscription, line drawing. After John C. Darnell, "The Early Hieroglyphic Annotation in the Nag el-Hamdulab Rock Art Tableaux, and the Following of Horus in the Northwest Hinterland of Aswan" *Archaéo-Nil* 25 (2015), 26, fig. 7.

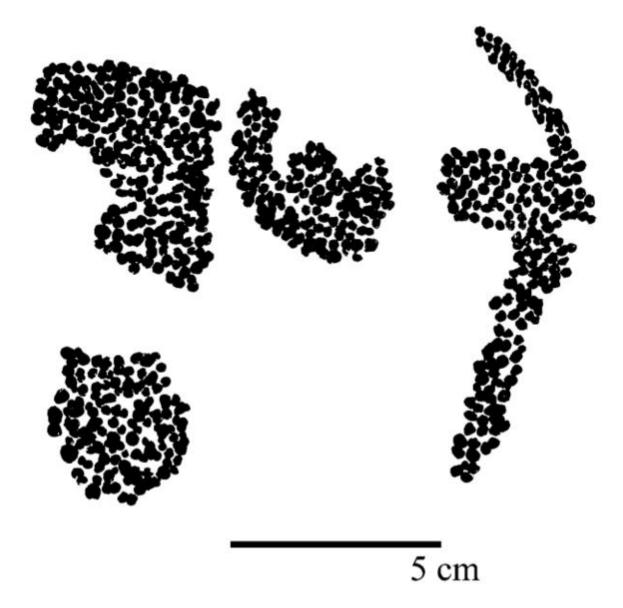


Figure 39. Wadi Nag el-Hamdulab site 7a, inscription, recording of pecking pattern. After S. Hendrickx, John C. Darnell, Maria Gatto, and Merel Eyckerman, "Iconographic and Palaeographic Elements Dating a Dynasty 0 Rock Art Site at Nag el-Hamdulab (Aswan, Egypt)" in *The Signs of Which Times? Chronological and Palaeoenvironmental Issues in the Rock Art of Northern Africa*, eds. Dirk Huyge, F. Van Noten, and D. Swinne, D. (Brussels, 2012), 326, fig. 11.



Figure 40. Wadi Nag el-Hamdulab site 7a, inscription, photograph. After Stan Hendrickx, John Coleman Darnell, Maria Carmela Gatto, and Merel Eyckerman. "Iconographic and Palaeographic Elements Dating a Dynasty 0 Rock Art Site at Nag el-Hamdulab (Aswan, Egypt)" in *The Signs of Which Times? Chronological and Palaeoenvironmental Issues in the Rock Art of Northern Africa*, eds. Dirk Huyge, F. Van Noten, and D. Swinne. (Brussels: Royal Academy for Overseas Sciences, 2012), 325, fig. 10.

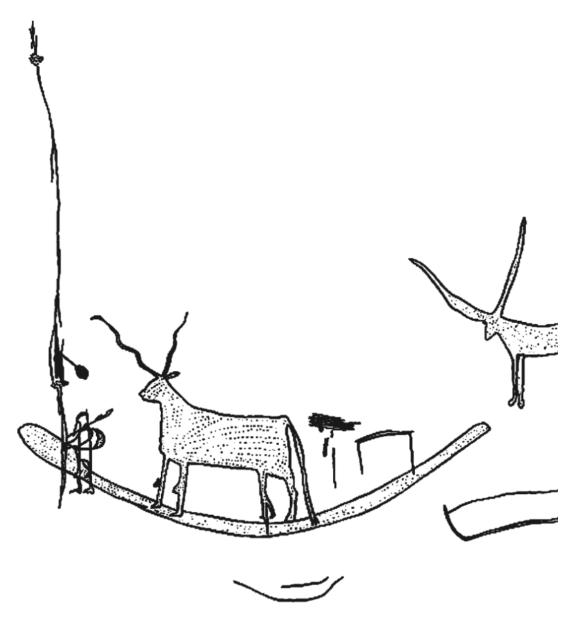


Figure 41. Wadi of the Horus Qa'a "Great Tableau," line drawing, detail of "Group V". After John C. Darnell, "The Wadi of the Horus Qa'a: a Tableau of Royal Ritual Power in the Theban Western Desert," in *Egypt at its Origins 3, Proceedings of the International Conference "Origin of the State. Predynastic and Early Dynastic Egypt", London, 27th July - 1st August 2008*, eds. Renée Friedman and P. N. Fiske. Orientalia Lovaniensia Analecta 205. (Leuven; Paris; Walpole, MA: Peeters, 2011), 1164, fig. 8.