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E-mail: claroscuro.cedcu@gmail.com

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Autor(es): Anna-Latifa Mourad

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Introduction: Community Resilience in Ancient Egypt

Anna-Latifa Mourad[*]

Abstract

This special thematic issue focusses on *Community Resilience in Ancient Egypt*. Although the subject of resilience has only re-entered the disciplines of the archaeology and history of Northeastern Africa and Western Asia in recent years, its aspects have been explored for several decades via the concept of collapse. This dossier pushes past collapse to consider the changing continuities of communities across different periods of Egypt's history. Bringing together diverse perspectives from climate change to communities of practice, it aims to spur further discussions and research into the various strategies of adaptation and resilience initiated and experienced by communities of Egypt's past.

Key-words: Community resilience; Collapse; Climate change; Ancient Egypt; Egyptology

[*]Macquarie University, Australia.
E-mail: anna.mourad@mq.edu.au

Introducción: Resiliencia Comunitaria en el Antiguo Egipto

Resumen

Este número temático especial se centra en la *Resiliencia Comunitaria en el Antiguo Egipto*. Aunque el tema de la resiliencia se hizo presente en las disciplinas de la arqueología y la historia del África nororiental y Asia occidental hace pocos años, sus aspectos se han explorado durante varias décadas a través del concepto de colapso. Este dossier va más allá del colapso para considerar las continuidades cambiantes de las comunidades a lo largo de distintos periodos de la historia de Egipto. Reuniendo diversas perspectivas, desde el cambio climático hasta las comunidades de práctica, pretende estimular nuevos debates e investigaciones sobre las diversas estrategias de adaptación y resiliencia iniciadas y experimentadas por las comunidades durante el pasado de Egipto.
Palabras clave: Resiliencia comunitaria; Colapso; Cambio climático; Antiguo Egipto; Egiptología

Recent global events have recentred resilience back into research focus. In turn, archaeologists and historians have offered several contributions and theoretical discussions to define, conceptualise, trace, and understand resilience in the past. This coincides with a growing number of researchers focussing on communities as opposed to and in alignment with such political institutions as states. Their studies include those on transformation at the community-level and in response to social, political, and environmental developments. In Egyptology, however, research into resilience, particularly that of communities, is only beginning to emerge. Associated concepts such as collapse and continuity have indeed been assessed, most commonly in view of the collapse of the Egyptian states of its Dynastic past as divided into the traditional chronological partitions of the Old, Middle, and New Kingdoms, and the continuity of socio-cultural features across the subsequent so-called Intermediate Periods. Thus, an investigation of these, and other developments, in view of resilience has great potential to enhance our understandings of how individuals and groups adapt to change. This is exemplified by the four diverse yet complimentary studies in this dossier that offer wide-ranging insights on community resilience in ancient Egypt.

'Community' describes a social unit that is distinguished by its shared practices and places.[1] According to Canuto and Yaeger, it is "an ever-emergent social institution that generates and is generated by supra-household interactions that are structured and synchronized by a set of places within a particular span of time" (Canuto and Yaeger 2000: 5). These interactions are closely interrelated with shared understandings, customs or behaviours that can shape the development of community identities (Canuto and Yaeger 2000: 6). The role of space and historical context is not to be underestimated, especially as communities could become well-adapted to specific places over time (Canuto and Yaeger 2000: 6; Kuecker and Hall 2012: 27). One community can also include different groups and group identities that can be archaeologically and historically assessed separately or in unison. As with such social identities, a community is not static but continuously experiences dynamic processes of transformation. The factors that influence change could be internal and/or external, and could be triggered by human activities and/or environmental or climatic shifts. Resulting processes and their outcomes could frame or be framed by the community's shared interactions and identities, its premises, and its adaptability and resilience.

Although variant definitions of resilience have appeared in the literature, it is considered herein as the degree to which a complex system is capable of self-organisation and of maintaining its structures, identities and functions despite experiencing, or resisting, internal and external stresses (Adger et al. 2005: 1036; Walker and Salt 2006; Bradtmöller et al. 2016: 3). This contrasts from the original use of resilience to examine the non-linear dynamic complexities of ecological systems, especially their capacity to withstand or return to their original states after disruption (Holling 1973; Gunderson 2000). Instead, when applied to assess the complexities of socio-ecological, psychological, or social units, the concept encapsulates such systems' capacity to learn, to adapt or to be flexible towards innovation or change (see Redman and Kinzig 2003: 3; Redman 2014). This may or may not lead to re-organisations or transformations (see Holling and Gunderson 2002; Schoon et al. 2011; Pearson and Pearson 2012).

In history and archaeology, resilience has been commonly utilised as either an explanatory or an analytical tool to identify and examine the complexities of such transformations. Some studies aim to heuristically determine adaptations that transpire in response to environmental stressors

[1] Varying definitions of 'community' exist, including those of social units with shared norms that can extend beyond a set of places, and that promote a sense of belonging. For more, see Canuto and Yaeger 2000: 5-6; Delanty 2003: 187; Kuecker et al. 2010: 250-253.

and, in more limited cases, in response to political, economic or social events (for an overview, see Redman and Kinzig 2003; Redman 2005; 2014; Løvschal 2022). Such research has increased in the last two decades with the incorporation of resilience theory in collapse studies (e.g. McAnany and Yoffee 2010; Faulseit 2016; Middleton 2017; Kemp and Cline 2022; see also Jacobson 2022; Weiberg and Finné 2022). Rather than approaching collapse as the systemic breakdown of culture and society, resilience thinking promotes the possibility of the survival of social units via adaptation and transformation (Løvschal 2022: 199).[2] Thus, archaeology and history offer the possibility of examining these processes over the *long durée* (Redman and Kinzig 2003).

To explore such resilience, related concepts proposed by Holling and Gunderson (2002) have also been employed. These include the adaptive cycle, which refers to a pattern of change that occurs in systems across four phases of re-organisation, growth or exploitation, conservation, and release or collapse (e.g. Redman and Kinzig 2003; Nelson et al. 2006; Rosen and Rivera-Collazo 2012). Each cycle is then interlinked in a panarchy of cycles that could occur simultaneously, but that differ in spatial, temporal and organisational scales (Holling and Gunderson 2002; Redman and Kinzig 2003; Middleton 2017). Panarchy consequently implies the association between short- and long-term processes. So, as an example, a community's adaptive cycle could be examined in association with that of a state system, potentially revealing the nature and extent of its resilience, and that of the state, across time and space. Despite such insights, the applicability of the adaptive cycle and panarchy model in archaeology and history has been criticised for its generalised or reductive observations of change, and its limited considerations of the complexities of socio-cultural transformations, particularly the role of agency (Bradtmöller et al. 2016; Haldon and Rosen 2018; Mourad 2021a; Løvschal 2022). As such, other approaches to understanding resilience in the past have been offered (see Løvschal 2022). These include complementing the adaptive cycle and panarchy theory with other concepts on transformation, agency and identity (e.g. Mourad 2021a; d'Alfonso 2023), and investigating resilience in terms of social units' adaptive capacities (e.g. Heitz et al. 2021) and their responses to specific triggers (e.g. Bogaard et al. 2017).

[2]However, as rightly argued by some (see Butzer 2012: 3633; Butzer and Endfield 2012; Løvschal 2022: 200), the dominant focus on environmental and climatic change as the catalysts of collapse has contributed to an emphasis on environmental determinism in resilience.

The studies in this Special Issue assess resilience via the latter approach; rather than applying the adaptive cycle, they investigate stimuli for change, such as possible environmental, climatic, political, or socio-cultural developments, or the responses and adaptations to such stimuli. Those that cover periods of state collapse stress that it need not reflect the fragmentation of cultures nor the disintegration of identities. Instead, it could be approached as one factor through which community transformations may be examined. This aligns with sociological conceptualisations of community resilience, wherein the role of agency increases in significance in periods of more flexible institutional structural conditions, such as those of politically destabilised central administrations (Kuecker and Hall 2011: 25-26). That is, individuals and groups could have greater influence on a community's capacity to adapt to variant stressors in such periods of political instability; they could, for instance, foster or hinder innovation, knowledge transmission, and social learning, all of which consequently affect resilience, identity negotiation and, in turn, transformation (see Berkes and Ross 2013; Winter 2023).[3]

The association between agency and adaptive capacity is exemplified in community responses to Dynastic collapse in Egypt. Several analyses have highlighted the role of localities in not only influencing political collapse and resurgence, but also flourishing at the community-level as centralised administrations weakened. To showcase this, two periods are here very briefly discussed: one corresponds to the Old Kingdom's collapse and the other to that of the Middle Kingdom.

Regarding the Old Kingdom, analyses over at least the last two decades have supported multicausal trends affecting its decline, including political leadership struggles as well as economic, administrative, ideological, environmental and climatic stressors (Butzer 2012; Bárta 2014; 2019; Kanawati and Swinton 2018; Barker in this issue). Some argue that climate change significantly contributed to the decline of the administration, but others point to socio-economic factors (see, for example, Bárta 2014 as opposed to Moreno García 2021). Most, however, agree that while the status and authority of the ruling structure in the capital diminished, those of prominent provincial families became increasingly pronounced from the Fifth Dynasty onwards (Grajetzki 2006: 7; Willems 2014: 23-33; Bárta

[3]Following Norris et al. (2008: 135-142), community resilience could be approached as a process that emerges from a set of networked adaptive capacities related to economic, social and cultural resources, as well as communication and competence. On this approach's applications in archaeology see Heitz et al. 2021: 77-79.

2019: 101-149; Kanawati and Swinton 2018: 70-73, 190-191). The material culture also points to growing regionalisation, especially visible in late Old Kingdom to First Intermediate Period contexts (e.g. Seidlmayer 1990). Although traditionally described as 'crude' and reflective of a chaotic 'dark age' (e.g. Bell 1971), the period from Dynasty 7 to early Dynasty 11 is now considered more broadly as a time of flourishing commercial networks, wealth distribution, and cultural innovation, especially in local communities (Seidlmayer 2000; Moreno García 2015). In response to environmental changes, Burn (2021) also argues for resilience, as communities adapted how local food resources were exploited. Therefore, such combined processes would have required individuals and groups to initiate or negotiate encounters and social ties, and to learn, adopt or adapt cultural elements. Eventually, the elites of Thebes and Herakleopolis expanded their authority by force and diplomacy until the Thebans, under the leadership of Montuhotep II, were able to consolidate power over the north (for an overview, see Seidlmayer 2000: 133-134; Willems 2013: 384-387; 2022: 682-683).

The negotiations between the newly established central administration and local leaders persisted into the Middle Kingdom. Despite possible administrative attempts to restrict their power by the reign of Dynasty 12's Senwosret III or Amenemhat III (Callender 2000: 163-164; Willems 2013: 389-392; 2014: 178-181), it appears that a transformation in power networks was related to Dynasty 13's weakened authority and the Middle Kingdom's transition into the Second Intermediate Period (see Quirke 1991; Siesse 2019; Willems 2022: 705-716). Some communities beyond the capital of Itjtawy grew in wealth and power, eventually becoming autonomous. The material culture of the late Middle Kingdom and Second Intermediate Period again points to accelerated innovation, transformed commercial and social networks, and wealth distribution away from Itjtawy. This is well-reflected in the evidence at Tell el-Dab'a in the northeastern Delta, which developed from a planned settlement in the early Middle Kingdom to the city Avaris, capital of the 15th Dynasty Hyksos (for an overview, see Bietak 1996; 2010). A study on the socio-cultural transformations attested at the site pointed to several adaptive strategies that promoted community resilience across Dynasties 12 to Dynasty 18, including the negotiation of group identity, political representation and ties with individuals and groups in the Delta and beyond (Mourad 2021a; 2021b: 354). However, with an increased population and a growing need for resources, the diversification of connectivity may have eventually reduced the community's resilience in Dynasty 15, increasing its

vulnerability to stressors (Mourad 2021a). Leaders of another community in the south, Thebes, then overtook Avaris, leading to the formation of another consolidated political authority in Egypt by early Dynasty 18.

Such examples clearly indicate that some community developments were interrelated with the emergence and decline of centralised political authorities. Certainly, it would be erroneous to consider them to have been solely due to political shifts; rather, such changes in regional powers and administrations could have accelerated or hindered particular local developments. Social ties and identities, as well as cultural elements persisted and transformed across periods of relative political stability, as across those of instability. Therefore, addressing to what extent these transformations were associated with community resilience can offer pertinent insights on the nature and role of adaptation and how it manifests in different contexts.

To this end, the four articles in this issue offer various insightful observations. Two consider changing cultural elements across the Old to Middle Kingdoms, and two concern responses to climate and environmental change.

Georgia Barker investigates transformations in serving sculptures of the late Old to Middle Kingdom. She highlights a range of developments in the production, types, quantity, location, and distribution of these sculptures, all of which indicate their transforming meanings, roles, and significance. Barker focusses her analysis on the changing placement of serving sculptures from tomb superstructures to burial chambers in the late 6th Dynasty. She traces both the emerging use of limestone serving sculptures of Dynasties 4 and 5, and the shift in location of wooden funerary models to burial chambers from Dynasty 6 to mid-Dynasty 12. Examining the function and characteristics of their contexts, she observes that the serving sculptures were ideally intended to be placed in enclosed, secure and concealed spaces. Barker stresses that the shift in placement from superstructure to substructure is an outcome of multiple factors of influence. Although religious changes have been usually proposed to explain this shift, Barker argues that historical circumstances should also be considered: communities were experiencing significant social challenges with weakening kingship, the growing power and wealth of the elite, a strained economy, climatic decline, and an increasing importance of the military, all of which probably contributed to heightened feelings of insecurity. Accordingly, Barker proposes that the modification in the placement of serving sculptures

could possibly be one of several adaptations to interrelated developments in religion and society that impacted burial practices.

Adaptations in construction practices of funerary items are considered by Arbuckle MacLeod. She examines changes and continuities in coffin production for insights into the emergence and responses of 'communities of practice'. The latter concept defines a community by the relations between its members as established by daily practices (see Lave and Wenger 1991; Wenger 1998). It concentrates on learning processes that produce material culture, and the identification of techniques and variations in production to enhance understandings of knowledge transmission and change within and between groups. Utilising this concept, Arbuckle MacLeod focusses on the social implications of changing coffin construction from the Old to the Middle Kingdoms. To determine construction choices, a selection of coffins is examined in detail. Coffin types, materials, joinery and finishing methods, as well as decoration are all considered alongside the function and religious significance of each construction choice. Complimenting this detailed analysis with a discussion of additional examples from the periods of focus, Arbuckle MacLeod identifies a clear shift towards the standardisation in coffin construction by Dynasty 6. She argues that this was tied to the emergence of a broader community of practice, with carpenters establishing workshops in several provinces. She also concludes that construction techniques remained relatively unchanged across the First Intermediate Period and Middle Kingdom, albeit with regional variations. This observation is particularly significant, stressing the continued knowledge transmission of practices despite the many religious, social and political developments that occurred across Egypt from the Old to the Middle Kingdom. As Arbuckle MacLeod highlights, the continuities and transformations in coffin construction emphasise workshop resiliency.

The contribution by Judith Bunbury, Piers Litherland, Jenny Litherland, Kelly Accetta Crowe, Bryony Smerdon, Alexis Pantos and Graham Smith additionally points to the importance of knowledge transmission for resilience over the *long durée*. The article discusses links between changing temperature and rainfall levels, and human activity across the Saharan Desert. Based on the authors' work in the Kharga Oasis and the Theban Mountain as part of Cambridge University's New Kingdom Research Foundation, they observe heightened activities of Saharan communities in the deserts particularly during the Eighteenth Dynasty and the Roman period. These include the increased use of long-distance routes with wells and waterholes; intensified funerary and settlement activities in the Theban

Mountain; and a range of construction and settlement activities in the Kharga Oasis during the Roman period. Based on climate proxies as well as archaeological evidence, the authors suggest that increased local rainfall promoted and sustained such activities during these periods. They note the re-use of specific desert springs, wells and routes, and highlight how this reflects the continued transmission of knowledge by Saharan communities. Indeed, such knowledge transmission could be regarded as a strategy of adapting to climate and environmental change, contributing to the resilience of these desert communities across significant spans of time.

In turn, if such communities had the adaptive capacity to respond relatively quickly and effectively to changes in their environment, would this restrict the impact that climate change has been perceived to have on state collapse? Edward Mushett Cole's article beckons us to reconsider this question, especially for the end of the New Kingdom and the Third Intermediate Period. The collapse of the New Kingdom state has attracted considerable attention, and, as Mushett Cole explains, many have pointed to "environmentally induced economic decline" as its cause, the effects of which seemingly continued into the Third Intermediate Period. To explore this proposed decline in the Third Intermediate Period, Mushett Cole offers a much-needed review of the only surviving environmental records of this time, the Nile Level Records at Karnak 'Quay'. Based on his quantitative analysis of 40 records dating from the reigns of Shoshenq I to Psamtik I, he observes that there were generally 'high' Nile floods in the Third Intermediate Period. These counter previous assumptions that agricultural production was in decline. In addition, Mushett Cole highlights that the records point to extensive volatility in the average flood, a feature consistent with other Nile level records from the Old Kingdom through to the Roman period. This ever-present volatility would have required continued mitigative responses to curtail the impact of high or low floods on agricultural production. In view of the Egyptians' well-demonstrated knowledge of their environment, Mushett Cole argues that they were likely aware of this volatility; consequently, if they could not adequately respond to changing Nile levels, this would not reflect the impact of environmental change per se but rather other exacerbating social, administrative or political factors. Accordingly, this could be approached as a diminished capacity to react, or to adapt, to an environmental stressor, indicating reduced resilience.

Altogether, the contributors utilise diverse forms of evidence and various methodologies in their analyses on different periods across Egypt's past. They highlight that monocausal explanations for socio-cultural

transformations overlook the complexities of such processes. Barker and Arbuckle MacLeod stress the importance of considering religious changes alongside historical and contextual developments; Barker indicates how periods of significant socio-political change could contribute to adapted burial practices, and Arbuckle MacLeod highlights how they tie with the emergence and resiliency of practice-based communities. Judith Bunbury and colleagues note the role of knowledge transmission in enhancing community resilience to climate and environmental change; and Mushett Cole cautions against disregarding communities' awareness of environmental volatility, which emphasises that socio-political factors should additionally be considered to determine changing adaptive capacities. Furthermore, all signify that interdisciplinary perspectives on resilience can offer complementary insights on whether, how and why ancient Egyptian communities reacted, persisted and adapted across time and space. Political, economic, administrative, social, cultural, climatic and environmental factors all influenced their capacities to respond at the community-level. By considering communities and their responses in our analyses, we can move past collapse to advance our understandings of the dynamic complexities of transformation.

As a final note, it's important to acknowledge that the studies in this Special Issue would not have been possible without the contributors themselves. As guest editor, I greatly thank them for agreeing to be involved in this Special Issue, for their insightful articles, and for their time and commitment throughout the process of producing this original material. I am additionally grateful to the reviewers of all the articles herein for their time and expertise, and express my deep gratitude to the *Claroscuro* editors and team for their support in bringing this issue to publication. Special thanks are particularly due to Cecilia Molla, to whom I am also grateful for inviting me to be guest editor. We hope the readers find this Special Issue a thought-provoking contribution that, in itself, transmits knowledge and ideas, with the intention to inspire many more, on community resilience and transformation in ancient Egypt and beyond.

Bibliography

ADGER, W. Neil, HUGHES, Terry P., FOLKE, Carl, CARPENTER, Stephen R. and ROCKSTRÖM, Johan (2005) "Social-ecological resilience to coastal disasters", *Science* 309 (5737): 1036-1039.

D'ALFONSO, Lorenzo (2023) "Resilience theory, human agency, and political archaeology: A RT revised model for the understanding of the Late Bronze – Iron Age transition in the post-Hittite world", *Journal of Ancient Near Eastern History* 11. DOI: https://doi.org/10.1515/janeh-2023-0001.

BÁRTA, Miroslav (2014) "Collapse hidden in success: Rise and fall of the Old Kingdom", *Kmt* 25 (1): 18-28.

BÁRTA, Miroslav (2019) *Analyzing collapse: The rise and fall of the Old Kingdom*. Cairo: American University in Cairo Press.

BELL, Barbara (1971) "The dark ages in ancient history. I. The first dark age in Egypt", *American Journal of Archaeology* 74 (1): 1-26.

BERKES, Fikret and ROSS, Helen (2013) "Community resilience: Toward an integrated approach", *Society and Natural Resources* 26 (1): 5-20.

BIETAK, Manfred (1996) *Avaris: The capital of the Hyksos. Recent excavations at Tell el-Dab'a*. London: British Museum Press.

BIETAK, Manfred (2010) "Houses, palaces and development of social structure in Avaris", in: Bietak, M., Czerny, E. and Forstner-Müller, I. (eds.), *Cities and urbanism in ancient Egypt. Papers from a workshop in November 2006 at the Austrian Academy of Sciences*. Denkschriften der Gesamtakademie 60, Unteruschungen der Zweigstelle Kairo des Österreichischen Archäologischen Instituts 35. Vienna: Österreichische Akademie der Wissenschaften, pp. 11-68.

BOGAARD, Amy, FILIPOVIĆ, Dragana, FAIRBAIRN, Andrew, GREEN, Laura, STROUD, Elizabeth, FULLER, Dorian and CHARLES, Michael (2017) "Agricultural innovation and resilience in a long-lived early farming

community: The 1,500-year sequence at Neolithic to early Chalcolithic Çatalhöyük, central Anatolia", *Anatolian Studies* 67: 1-28.

BRADTMÖLLER, Marcel, GRIMM, Sonjia and RIEL-SALVATORE, Julien (2016) "Resilience theory in archaeological practice – An annotated review", *Quaternary International* 446: 3-16.

BURN, John W. (2021) *A River in 'Drought'? Environment and cultural ramifications of Old Kingdom Climate Change*. Oxford: BAR Publishing.

BUTZER, Karl W. (2012) "Collapse, environment, and society", *Proceedings of the National Academy of Sciences of the United States of America* 109 (10): 3632-3639.

BUTZER, Karl W. and ENDFIELD, Georgina, H. (2012) "Critical perspectives on historical collapse", *Proceedings of the National Academy of Sciences of the United States of America* 109 (10): 3628-3631.

CALLENDER, Gae (2000) "The Middle Kingdom renaissance (c. 2055–1650 BC)", in: Shaw, I. (ed.), *The Oxford history of ancient Egypt*. New York: Oxford University Press, pp. 137-171.

CANUTO, Marcello A. and YAEGER, Jason (2000) *The archaeology of communities. A New World perspective*. New York: Routledge.

DELANTY, Gerard (2003) *Community*. London: Routledge.

FAULSEIT, Ronald K. (2016) "Collapse, resilience, and transformation in complex societies: Modeling trends and understanding diversity", in: Faulseit, R.K. (ed.), *Beyond collapse. Archaeological perspectives on resilience, revitalization and transformation in complex societies*. Center for Archaeological Investigations, Occasional Paper No. 42. Carbondale: Southern Illinois University Press, pp. 3-26.

GRAJETZKI, Wolfram (2006) *The Middle Kingdom of ancient Egypt: History, archaeology and society*. London: Duckworth.

GUNDERSON, Lance H. (2000) "Ecological resilience-In theory and application", *Annual Review of Ecology and Systematics* 31: 425-439.

HALDON, John and ROSEN, Arlene (2018) "Society and environment in the East Mediterranean ca 300–1800 CE. Problems of resilience, adaptation and transformation. Introductory essay", *Human Ecology* 46: 275-290.

HEITZ, Caroline, HINZ, Martin, LAABS, Julian and HAFNER, Albert (2021) "Mobility as resilience capacity in northern Alpine Neolithic settlement communities", *Archaeological Review from Cambridge* 36 (1): 75-105.

HOLLING, C.S. (1973) "Resilience and stability of ecological systems", *Annual Review of Ecology and Systematics* 4: 1-23.

HOLLING, C.S. and GUNDERSON, Lance H. (2002) "Resilience and adaptive cycles", in: Gunderson, L.H. and Holling, C.S. (eds.), *Panarchy: Understanding transformations in human and natural systems.* Washington, DC: Island Press, pp. 25-62.

JACOBSON, Matthew J. (2022) "Archaeological evidence for community resilience and sustainability: A bibliometric and quantitative review", *Sustainability* 14 (24): e16591.

KANAWATI, Naguib and SWINTON, Joyce (2018) *Egypt in the Sixth Dynasty. Challenges and responses.* Wallasey: Abercromby Press.

KEMP, Luke and CLINE, Eric H. (2022) "Systemic risk and resilience: The Bronze Age collapse and recovery", in: Izdebski, A.; Haldon, J. and Filipkowski, P. (eds.), *Perspectives on public policy in socio-environmental crises: What the future needs from history.* Cham: Springer, pp. 207-223.

KUECKER, Glen D. and HALL, Thomas D. (2011) "Resilience and community in the age of world-system collapse", *Nature and Culture* 6 (1): 18-40.

KUECKER, Glen D., MULLIGAN, Martin and NADARAJAH, Yaso (2010) "Turning to community in times of crisis: Globally derived insights on local community formation", *Community Development Journal* 46 (2): 245-264.

LAVE, Jean and WENGER, Etienne (1991) *Situated learning: Legitimate peripheral participation.* Cambridge: Cambridge University Press.

LØVSCHAL, Mette (2022) "Retranslating resilience theory in archaeology", *Annual Review of Anthropology* 51: 195-211.

MCANANY, Patricia A. and YOFFEE, Norman (2010) "Why we question collapse and study human resilience, ecological vulnerability, and the aftermath of empire", in: McAnany, P. and Yoffee, N. (eds.), *Questioning collapse: Human resilience, ecological vulnerability and the aftermath of empire*. Cambridge: Cambridge University Press.

MIDDLETON, Guy D. (2017) "The show must go on: Collapse, resilience, and transformation in 21st Century archaeology", *Reviews in Anthropology* 46 (2-3): 78-105.

MORENO GARCÍA, Juan Carlos (2015) "Climatic change or sociopolitical transformation? Reassessing late 3 rd Millennium BC in Egypt", in: Meller, H., Arz, H.W., Jung, R. and Risch, R. (eds.), *2200 BC – A climatic breakdown as a cause for the collapse of the Old World? 7 th archaeological conference of central Germany, October 23–26, 2014 in Halle (Saale)*. Tagungen des Landesmuseums für Vorgeschichte Halle 13. Halle: Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, Landesmuseum für Vorgeschichte, pp. 79-94.

MORENO GARCÍA, Juan Carlos (2021) "Climate, state building and political change in Egypt during the Early Bronze Age: A direct relation?", in: Erdkamp, P., Manning, J.G. and Verboven, K. (eds.), *Climate Change and ancient societies in Europe and the Near East*. Palgrave Studies in Ancient Economies. Cham: Palgrave Macmillan, pp. 201-213.

MOURAD, Anna-Latifa (2021a) "Strategies of survival? Change, continuity and the adaptive cycle across the Middle to early Late Bronze Age at Tell el-Dab'a, Egypt", *Journal of Anthropological Archaeology*: 101367. DOI: `https://doi.org/10.1016/j.jaa.2021.101367`.

MOURAD, Anna-Latifa (2021b) *The enigma of the Hyksos. Volume II: Transforming Egypt into the New Kingdom. The impact of the Hyksos and Egyptian-Near Eastern relations. Contributions to the Archaeology of Egypt, Nubia and the Levant 10*. Wiesbaden: Harrassowitz Verlag.

NELSON, Margaret C., HEGMON, Michelle, KULOW, Stephanie and SCHOLLMEYER, Karen G. (2006) "Archaeological and ecological perspectives on reorganization: A case study from the Mimbres Region of the U.S. Southwest", *American Antiquity* 71 (3): 403-432.

NORRIS, Fran H., STEVENS, Susan P., PFEFFERBAUM, Betty, WYCHE, Karen F. and PFEFFERBAUM, Rose L. (2008) "Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness", *American Journal of Community Psychology* 41: 127-150.

PEARSON, Leonie J. and PEARSON, Craig J. (2012) "Societal collapse or transformation, and resilience", *Proceedings of the National Academy of Sciences of the United States of America* 109 (30): E2030-E2031.

QUIRKE, Stephen (1991) "Royal power in the 13th Dynasty", in: Quirke, S. (ed.) *Middle Kingdom studies*. New Malden: SIA, pp. 123-139.

REDMAN, Charles L. (2005) "Resilience theory in archaeology", *American Anthropologist* 107 (1): 70-77.

REDMAN, Charles L. (2014) "Should sustainability and resilience be combined or remain distinct pursuists", *Ecology and Society* 19 (2): 37.

REDMAN, Charles L. and KINZIG, Ann P. (2003) "Resilience of past landscapes: Resilience theory, society, and the longue durée", *Conservation Ecology* 7 (1): 14.

ROSEN, Arlene M. and RIVERA-COLLAZO, Isabel (2012) "Climate change, adaptive cycles, and the persistence of foraging economies during the late Pleistocene/Holocene transition in the Levant", *Proceedings of the National Academy of Sciences of the United States of America* 109 (10): 3640-3645.

SCHOON, Michael, FABRICIUS, Christo, ANDERIES, John M. and NELSON, Margaret (2011) "Synthesis: Vulnerability, traps, and transformations – Long-term perspectives from archaeology", *Ecology and Society* 16 (2): 24.

SEIDLMAYER, Stephan J. (1990) *Gräberfelder aus dem Übergang vom Alten zum Mittleren Reich: Studien zur Archäologie der Ersten Zwischenzeit*. Heidelberg: Heidelberger Orientverlag.

SIESSE, Julien (2019) *La XIIIe dynastie: histoire de la fin du Moyen Empire égyptien*. Paris: Presse de l'Université Paris- Sorbonne.

WALKER, Brian H. and SALT, David (2006) *Resilience thinking: Sustaining ecosystems and people in a changing world*. Washington, DC: Island Press.

WEIBERG, Erika and FINNÉ, Martin (2022) "Human-environment dynamics in the ancient Mediterranean. Keywords of a research field", *Opuscula. Annual of the Swedish Institutes at Athens and Rome* 15: 221-252.

WENGER, Etienne (1998) *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

WILLEMS, Harco (2013) "Nomarchs and local potentates: The provincial administration in the Middle Kingdom", in: Moreno García, J.C. (ed.), *Ancient Egyptian administration*. Leiden/Boston: Brill, pp. 341-392.

WILLEMS, Harco (2014) *Historical and archaeological aspects of Egyptian funerary culture: Religious ideas and ritual practice in Middle Kingdom elite cemeteries*. Leiden: Brill.

WILLEMS, Harco (2022) "Egypt's Middle Kingdom: A view from within", in: Radner, Karen; Moeller, Nadine and Potts, Daniel T. (eds.), *The Oxford history of the ancient Near East. Volume II: From the end of the Third Millennium BC to the fall of Babylon*. New York: Oxford University Press, pp. 656-727.

WINTER, Matthew A. (2023) "Towards a model for sociocultural transformation: Anthropocentric approaches to resilience, collapse, and resistance", *Journal of Ancient Near Eastern History* 11. DOI: `https://doi.org/10.1515/janeh-2022-0012`.