30 Pieces of Evidence Supporting Jacek Krzysztoń's Theory on the Socio-Economic Purpose Behind the Building of the Great Pyramids in Egypt

This document serves as a supplementary analysis to the previously published article on Zenodo.org (DOI: 10.5281/zenodo.15858488). The goal is to substantiate the proposed theory through a detailed presentation and discussion of evidence drawn from academic literature.

Core Premises of the Theory:

- **The construction of the pyramids was, first and foremost, a deliberately planned strategy of state policy.** Their primary function was to stimulate demand, drive national economic development, and assist the state in managing society.

- **The pyramids acted as a form of "social program" in ancient Egypt.** Through the redistribution of goods, they provided employment, food, and care to thousands of workers and their families, thereby mitigating social tensions and inequalities.

- **Their construction served as a means of social integration.** This was particularly important after the unification of Upper and Lower Egypt—a common national project helped build unity and bridge divisions.

- **The burial of rulers in the great pyramids was most likely symbolic.** The pyramids may have functioned as ideological symbols of the pharaoh's divinity and immortality, while the actual burial places remained concealed.

- **The building process—not the final structure—was the most significant element.** The scale, continuity, and collective nature of the work itself were a success: they kept the state apparatus and social order in motion.

- **The pyramids were more functional than ceremonial in character.** Their significance extended beyond funerary rituals—they played operational, economic, and integrative roles.

The Full Content of Krzysztoń's Theory on the Socio-Economic Purpose of Building the Great Pyramids in Egypt (2023)

> *"The Great Pyramids of Egypt, often described in history primarily as tombs, were in fact a perfect tool in the hands of the pharaohs, used both for executing a well-planned economic development strategy of their nation and for maintaining an extensive social welfare program, while mitigating the cultural, social, and economic tensions that existed between the inhabitants of Upper and Lower Egypt following their unification.*
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> *Moreover, historical evidence suggests that many rulers were aware of the risks associated with revealing their burial sites, which is why their bodies, along with their treasures, often rested in more discreet locations.*
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> *This highlights that the Great Pyramids played a more functional rather than ceremonial role, and the success of the pharaohs was not in the rapid completion of the monuments but in the very process of their prolonged construction."*

Introduction

To support the proposed theory, statements from leading Egyptologists, archaeologists, historians, and anthropologists from the world's most renowned research institutions were analyzed – including Harvard, Oxford, Cambridge, UCLA, the University of Tokyo, and the French CNRS. Although these statements were formulated in various research contexts, they reveal a surprisingly coherent picture.

The material includes both archaeological findings (e.g., discoveries of workers' settlements and the mystery of empty tombs), as well as economic and historical analyses (e.g., studies on redistribution systems in ancient Egypt and reinterpretations of royal inscriptions). Moreover, in order to better capture the social and economic mechanisms behind pyramid construction, general theories from modern social sciences (psychological and economic) have also been considered, as they help to better understand the pyramids as tools for state integration and organization.

No hierarchy has been imposed among the quoted statements – rather than assigning them different levels of importance, the aim was to present a broad spectrum of evidence and analogies to offer a more complete socio-economic context for pyramid construction. This interdisciplinary dataset allows us to view the pyramids from a new perspective. The first section presents a table of key quotations from recognized authors, along with commentary on their relevance to the theory. The second section develops each of these quotations into a full manuscript with expanded analysis and justification.

A Compilation of 30 Academic Sources and Expert Statements Supporting Krzysztoń's Theory on the Socio-Economic Purpose of Building the Great Pyramids in Egypt

No.	Author	Author's Quotation	Relevance to the Theory
1	**Kurt Mendelssohn** *University of Oxford; physicist*	*"The primary goal of pyramid construction was not the finished structure, but the building process itself. It was thanks to this that Egypt transformed from a loose society into a unified state."*	Confirms that the construction process itself—rather than the completed tomb—was the true objective. It mobilized labor forces, organized society, and unified the country, serving primarily a socio-economic rather than funerary function.
2	**Mark Lehner & Richard Redding** *Egyptologist (Director of AERA, University of Chicago) and Archaeozoologist (Professor, University of Michigan)*	*"We estimated that the four gallery blocks could accommodate about 1,600 people, or even more, if the entire complex — rising to 7 meters and extending 150 meters from north to south — had a mezzanine or flat roof."*	Confirms that the scale of accommodation indicates an organized system of labor, maintenance, and settlement — typical of a state-level project.
		"Religion served as a form of legitimization, but the actual mechanism of pyramid construction relied on central planning and resource organization — including food logistics, labor, and seasonal workforce employment."	The construction was based on logistics and resource management — the process was primarily economic, not sacred.
		"Very few religious structures were unearthed in the entire settlement — only small chapels and a handful of religious symbols."	The scarcity of religious structures suggests that the religious function was secondary to the practical and operational nature of the settlement.
		"Local communities served both on boats and in labor teams."	Indicates a broad, centralized system for mobilizing labor across various economic sectors.
		"The silo building complex (SBC), which included silos and bakeries..."	The presence of food infrastructure suggests the project provided comprehensive social welfare.
		"A complex of corridors, ramps, and stairways leading to a depression that might have been a port."	Its connection to a water transport network suggests logistics on the scale of a state megaproject.
3	**Pierre Tallet** *Université Paris-Sorbonne; Egyptologist, Professor, CNRS member*	*"Today, with my crew, I transported two loads of stone from Tura to the pyramid [Akhet-Khufu], through the port of Ro-She Khufu, in accordance with the instructions of inspector Ankhaf."* *— from the diary of Merer, published by Pierre Tallet*	The pyramid's construction relied on wage labor and state-managed logistics — supporting an economic rather than ideological or forced-labor interpretation of the project.

4	**Barry Kemp** *University of Cambridge; Egyptologist, Professor Emeritus*	*"The Egyptian state was primarily a redistribution mechanism. Resources flowed in through taxes and labor, and were then distributed by the state via administrative and ideological structures."*	Confirms that the Egyptian state operated as a centralized system for redistributing labor and resources.
5	**Stuart Tyson Smith** *University of California, Santa Barbara (UCSB); Archaeologist, Professor*	*"Resource management was conducted through the state apparatus, independently of the priesthood."*	The economic and organizational functions of the pharaoh's rule were not dependent on religion — suggesting the construction of the pyramids may have had a secular and practical nature.
6	**George A. Reisner** *Harvard University; Archaeologist, Egyptologist, Professor*	*"The sarcophagus was found empty, despite the royal seal and complete burial equipment."* *— referring to tomb G7000X of Queen Hetepheres I, mother of Khufu.*	The absence of Khufu's mother's body in a tomb he himself confirmed and sealed as complete indicates a symbolic burial function.
		"There was no superstructure above the tomb."	The lack of superstructure suggests that the tomb's form held no significance for religious ritual but served other functions.
7	**Christina Geisen** *University of Basel; Egyptologist*	*"The restoration of temples, priesthood, and cults served not only religious goals but also economic and social ones — rebuilding state structures."* *— referring to the Restoration Stela of Tutankhamun.*	Confirms that the restoration of religion functioned as a tool for economic recovery and redistribution — analogous to the pyramids' role as state-led projects.
8	**Nozomu Kawai** *Kanagawa University; Egyptologist, Professor*	*"Egypt's wealth was once again transferred to the temples and aristocracy. The restoration of the cult stabilized the social order and strengthened statehood."* *— referring to the Restoration Stela of Tutankhamun.*	The transfer of resources to central institutions served to restore order and social control — consistent with redistributive and integrative functions.
9	**Kathryn A. Bard** *Boston University; Egyptologist, Professor*	*"State formation depended on the development of a centralized administration capable of collecting resources and redistributing them along the Nile Valley."*	Pyramid construction may have served as a tool for implementing this centralization through a mass-scale state project.
10	**Jean-Pierre Adam** *CNRS (Centre National de la Recherche Scientifique); Architect, Egyptologist*	*"The construction of the pyramid was an act of collective organization. It cannot be understood without reference to the administrative structure and division of labor in the Egyptian state."*	The pyramids functioned as tools of social engineering — mobilizing, organizing, and integrating society through labor and administration.
11	**Adam Kaiser** *University of California, Santa Cruz; Researcher*	*"The pyramids may have functioned as a tool for wealth redistribution within society. Through the transfer of resources from the elite to state-employed workers, the monarch strengthened central authority and reduced dependence on priestly centers in Lower Egypt."*	The construction project acted as an instrument of redistribution and centralization, stabilizing the economy and reinforcing state power.

12	**Salima Ikram** *American University in Cairo; Egyptologist, Professor*	*"Some monumental tombs may never have contained a body. Their purpose was to demonstrate the presence and power of the deceased — not necessarily their physical remains underground."*	The pyramids served a pragmatic function of integration and propaganda rather than being primarily funerary structures.
13	**David A. Warburton** *Independent Researcher (formerly CNRS, University of Copenhagen); Historical Economist*	*"The Egyptian economy was based on control and redistribution of goods by central state institutions, not on market exchange."*	The pyramids may have been both a physical and symbolic tool of redistribution within a centrally planned economy.
14	**Joyce Tyldesley** *University of Manchester; Egyptologist*	*"Hatshepsut's monumental architecture served to consolidate power and organize society through employment and infrastructure development."*	Hatshepsut's building projects were used to create jobs and stabilize the state, showing that monumental architecture in Egypt had integrative and redistributive functions.
15	**Barry Kemp & Marianne Eaton-Krauss** *University of Cambridge; Egyptologist, Professor Emeritus / Independent Egyptologist*	*"For ordinary people, religion was not a driving force in daily life; it was ritualized, distant, and state-controlled."*	The main social motivations were practical and down-to-earth — construction activity served integrative and economic purposes.
16	**John Baines** *University of Oxford; Egyptologist, Professor Emeritus*	*"Social relations were based on reciprocity: labor in exchange for care, food, and a sense of stability."*	The pyramids may have functioned as a form of collective currency — their construction was a way of exchanging labor for social welfare and security. This supports the interpretation of the pyramids as tools for managing society.
17	**Joseph A. Tainter** *Utah State University; Anthropologist, Professor*	*"The monumental form of the pyramid was a tool for legitimization and resource mobilization — a record of the state's agency."*	Confirms that the pyramids served as instruments of authority building and as tools for collecting and redistributing resources.
18	**Jared Diamond** *University of California, Los Angeles (UCLA); Geographer, Biologist, Professor*	*"The seasonal labor surplus was used by ancient states for public projects, such as the Egyptian pyramids, which united society and advertised state power."*	The construction of the pyramids was a way to utilize surplus labor and unify the population under the state framework.
19	**Stephen Quirke** *University College London; Egyptologist, Professor*	*"During pyramid construction, the central administration relied on a network of local officials responsible for collecting resources, supervising labor, and recording all transactions — it resembled a ministry of economy more than a religious institution."*	Administrative documents suggest that the pyramids were part of a secular system of resource management, rather than solely religious monuments.

20	**Kara Cooney** *University of California, Los Angeles (UCLA); Egyptologist, Professor*	*"Royal power is theater, economics, and religion — never just one of these."*	Emphasizes that state actions — including construction — were multifaceted and had practical dimensions.
		"It wasn't about religion. It was about who had the means to impose that religion on others."	Control over resources and labor was a primary mechanism of power — and the pyramids served this purpose in practice.
21	**Zahi Hawass** *Egyptian Ministry of Antiquities; Egyptologist*	*"It was the building of the pyramids that built Egypt. It was a national project that involved the entire society, organized by the government, which provided food, shelter, and care."*	A clear statement that the building process was the foundation of the state and a form of national collective effort.
22	**John M. Keynes** *University of Cambridge; Economist, Professor*	*"The government could hire people to dig holes and fill them up — or to build pyramids."*	Pyramid building may have served ancient rulers as a means of social integration and stimulating demand for labor.
23	**Mark Lehner** *AERA, University of Chicago; Egyptologist, Director*	*"Our work suggests that the inhabitants of Giza were deliberately mixed by origin in order to create new social bonds."*	The intentional integration of groups from various regions of Egypt proves that the pyramid project aimed to build social and national cohesion — in line with the socio-economic theory of their construction.
24	**Andreas Winkler** *German Archaeological Institute (Cairo); Egyptologist*	*"Pyramid construction was not only a religious endeavor but also a way to launch an organized system of labor and logistics based on the exchange of resources and work for food and state-provided care."*	Describes the pyramids as part of a state-driven system of labor-for-resource exchange — a typical social welfare mechanism.
25	**Michael E. Porter** *Harvard Business School; Economist, Professor*	*"Competitive advantage arises from local conditions — those that foster innovation, specialization, and long-term investments in social and physical capital."*	Massive investments like the pyramids could have initiated enduring clusters of socio-economic development — fostering specialization, labor organization, and social integration.
26	**Elton Mayo** *Harvard Business School; Psychologist, Organizational Sociologist, Professor*	*"Man is not an economic being — he is primarily a social being."*	Mayo's experiments showed that participation in large projects and a sense of belonging are crucial for efficiency and social integration — supporting the idea that the pyramids could have been deliberately planned tools in this very context.
27	**Michael J. Wenke** *University of Washington; Archaeologist, Professor*	*"Egypt succeeded due to a planned economy and labor mobilization — the pyramids were an expression of administrative agency."*	Monumental architecture was a manifestation of state apparatus effectiveness and central logistics — exactly as Krzysztoń's theory suggests regarding the economic purpose of pyramid building.

28	**David Wilkinson** *University of California, Los Angeles (UCLA); Political Scientist, Historian of Civilizations*	*"Monumental structures were tools of spatial and psychological management — they organized society."*	The pyramids served not only as physical infrastructure but also as instruments for shaping social order and hierarchy — confirming their role as systems of control and integration.
29	**Toby Wilkinson** *University of Cambridge; Egyptologist, Professor*	*"The pyramid was not merely a tomb, but a political statement of power, reach, and control — a monument aimed as much at the living as at the dead."*	Indicates that the monument served as a medium for communicating power and social order, not just as a final resting place for the ruler.
30	**Juan Carlos Moreno García** *CNRS, École Pratique des Hautes Études (Paris); Egyptologist, Professor*	*"Trade appears as an underrated phenomenon, in which markets, private merchants, and peasant 'entrepreneurs' drove exchange... in ways independent of any institution — including temples or the crown."*	The economy functioned independently of religious institutions — suggesting that pyramids could have been embedded in this secular logic.

1. The Pyramid Was Not the Foundation of the Egyptian State—It Was the Process of Its Construction

Source: Kurt Mendelssohn. *The Riddle of the Pyramids.* London: Thames and Hudson, 1974.

Physicist and historian of science at the University of Oxford, Kurt Mendelssohn, proposed as early as the 1970s an innovative perspective on the pyramids—as instruments of state formation. In his book *The Riddle of the Pyramids*, he stated plainly:

"The primary purpose of building the pyramids was not the completed structure, but the process of construction itself. It was through this process that Egypt was transformed from a loosely organized society into a unified state."

According to Mendelssohn, the true value did not lie in the finished pyramid, but in its long-term realization—which organized resources, mobilized people, demanded centralized management, and fostered collective effort. The pyramids functioned as tools of social and political integration: they reinforced the authority of the state, created infrastructure for cooperation, and educated the population through participation in a grand common endeavor.

Mendelssohn also noted that once the Egyptian state had achieved institutional maturity, the size of the pyramids began to decrease—their original function had been fulfilled. In this sense, these monumental constructions served as a pretext for implementing state-building objectives, rather than as final goals of purely sepulchral character.

This represents one of the earliest and most explicit attempts to interpret the pyramids as a component of socio-economic state engineering—a view fully aligned with the theory of Jacek Krzysztoń, which identifies the construction process as the key to understanding Egypt's model of social integration and economic success.

2. Logistics and Employment Were the True Purpose of Construction

Source: Mark Lehner & Richard Redding. "Labor and the Pyramids: The Heit el-Ghurab 'Workers' Town' at Giza," in *The Giza Plateau Mapping Project*, 2015.

Archaeological discoveries by Egyptologist Mark Lehner (director of AERA, affiliated with the University of Chicago) and archaeozoologist Richard Redding (University of Michigan) at Heit el-Ghurab (commonly referred to as the "workers' town") revealed a complex infrastructure designed not only for housing but also for logistics, food distribution, and the management of labor for the pyramid construction crews.

Finds included bakeries, food storage facilities, systematically arranged barracks, and a planned street network—all of which indicate a carefully organized system for coordinating entire work teams.

Crucially, according to the researchers, this was not forced labor, but rather structured seasonal employment that aligned with the flooding of the Nile and the agricultural off-season.[1] Thousands of Egyptians found not only employment there, but also a sense of community—the town was intentionally integrative, mixing people from different regions of the country.

Although Lehner and Redding do not explicitly claim that the pyramids served an economic function, the labor system they describe clearly demonstrates that the construction process functioned as a tool for managing human and material resources. Redding notes:

"Religion served as a form of legitimation, but the actual mechanism behind the pyramid construction was based on central planning and resource organization—logistics of food supply, labor, and seasonal employment of the workforce."

Moreover, in another passage, they describe:

"We estimated that the four gallery blocks could house around 1,600 people, or even more if the entire complex—rising to 7 meters in height and stretching 150 meters from north to south—had included a mezzanine or flat roof."

From the perspective of the economic theory of the pyramids, Heit el-Ghurab stands as solid infrastructural evidence: it confirms that the pyramids were planned projects for the redistribution of labor, resources, and state ideology—something far beyond mere sepulchral constructions.

Additionally, the scale of provisioning for this camp is striking: according to archaeozoological analyses, around 11 cattle and 37 sheep had to be slaughtered daily to feed the pyramid construction crews. Such a vast and centralized provisioning system highlights the administrative efficiency of the Egyptian state in managing a project of this magnitude.

3. The Wadi al-Jarf Papyri as Evidence of State Organization in Pyramid Construction

Source: Pierre Tallet. *La Route de la Pyramide.* Paris: Fayard, 2017; Merer's documents (Papyrus Jarf A and B).

Pierre Tallet, an Egyptologist at Université Paris-Sorbonne and a member of the French CNRS, discovered Egypt's oldest known papyri in the harbor of Wadi al-Jarf. These documents include the diary of Merer, an overseer responsible for transporting limestone blocks from the Tura quarries to the pyramid complex of Khufu. The papyri offer a detailed account of labor organization, administrative procedures, and cooperation with riverine and maritime ports, illustrating the functioning of an advanced state apparatus.

In one passage, Merer describes the daily logistics of stone transport:

"Today, with my crew, I made two deliveries of stone from Tura to the pyramid [**Akhet-Khufu**]**, via the port of Ro-She Khufu, in accordance with the instructions of the inspector Ankhaf."**

The Wadi al-Jarf papyri serve as hard evidence that the construction of the Great Pyramid of Khufu was a state project—one that required efficient logistics, oversight, and strict scheduling. Their contents suggest that the pyramid was not solely a sacred structure, but also a key component of Egypt's administrative and economic infrastructure.

Although Tallet does not offer an explicit economic interpretation, his discovery supports the view that the pyramids served organizational, social, and economic functions—as tools of centralized governance and societal integration.

4. The Egyptian State Operated on the Principle of Resource Redistribution

Source: Barry Kemp. *Ancient Egypt: Anatomy of a Civilisation*, 2nd ed. London: Routledge, 2006, p. 311.

Barry Kemp, one of the most prominent Egyptologists, describes Old Kingdom Egypt in his landmark work *Ancient Egypt: Anatomy of a Civilisation* as a state based on a centralized system of resource management. Its primary function was to organize production, taxation, and the redistribution of goods on a national scale. He explicitly emphasizes:

"The Egyptian state was above all a redistributive mechanism. Resources flowed in through taxation and labor, and were then distributed by the state through administrative and ideological structures."

In this model, the economic system was not based on a free market, but on an exchange of labor for state-provided care and sustenance. The population was engaged in large-scale construction projects in return for food, clothing, shelter, and protection—all coordinated through a centralized administration. Central to this system were state granaries, bureaucratic offices, and logistical networks that enabled the redistribution of goods between regions.

Within this structure, the pyramids could have functioned as visible tools of redistribution—engaging workers in exchange for state welfare. Their monumental form not only legitimized the power of the pharaoh, but also stood as a testament to the state's capacity to manage the economy and integrate society. Kemp observes that the pharaoh was not merely the embodiment of divinity, but primarily the steward of resources and coordinator of the entire population.

From the perspective of the theory of pyramids as economic and integrative projects, Kemp's analysis provides one of the strongest academic validations—demonstrating that Egyptian statehood rested on secular and economic foundations, rather than solely on sacred purpose.

5. The Pyramids as Practical Undertakings Supported by Priestly Legitimation

Source: Stuart Tyson Smith. "Wielding the Past," in *Egypt, Israel, and the Ancient Mediterranean World.* Brill, 2003.

Stuart Tyson Smith, an American archaeologist and professor at the University of California, Santa Barbara (UCSB), specializes in power dynamics and state

structures in ancient Egypt. He articulates one of the most groundbreaking statements in the analysis of monumental projects. As he observes:

"Resource management was carried out by the state apparatus, independent of the priesthood."

This sentence draws a clear line between two spheres of influence: religious institutions and the administrative structure. While pyramids have traditionally been viewed as expressions of piety and ritual, Smith demonstrates that the actual oversight of their construction may have belonged to the secular authorities—organized, deliberate, and logistically self-sufficient. This implies that the pharaoh acted as a state administrator, rather than solely as a priest or demigod.

In light of these new interpretations, it follows that monumental building projects—such as the pyramids—served as tools for managing population and resources independently of religious doctrine. Nevertheless, they still required priestly legitimation to ensure social consensus and acceptance. This explains why sources describe them as tombs, allowing rulers to frame such projects as "sacred," even though their primary function was to organize labor, integrate society, and facilitate redistribution.

Smith's statement thus provides a crucial reference point for modern interpretations suggesting that monumental structures were conceived and executed by secular administrative systems—not necessarily by temple institutions. It reinforces the view that the pyramids were instruments of state management, while religion served only a supporting—rather than a decision-making—role.

6. The Absence of Cheops's Mother's Body Suggests a Symbolic Burial and the Start of a Dynastic Tradition

Source: George A. Reisner. (Harvard University; archaeologist, Egyptologist, professor). *The Tomb of Hetep-heres, the Mother of Cheops.* Boston Museum of Fine Arts Expedition, 1927.

In 1925, George A. Reisner, a distinguished American Egyptologist and professor at Harvard University, discovered tomb G7000X in Giza. It contained the undisturbed sarcophagus of Queen Hetepheres I, mother of Pharaoh Khufu (Cheops). The burial site was fully equipped with items appropriate for a queen: a ceremonial chair, a bed, jewelry, canopic jars containing internal organs, and numerous everyday objects—all sealed with the royal insignia of Cheops himself. However—to Reisner's great astonishment—the sarcophagus was empty.

The find was so perplexing that Reisner documented it extensively in his excavation reports. He was unable to offer a logical explanation for the absence of the body,

given the elaborate burial preparations. Even more surprisingly, the tomb lacked any above-ground structure—no pyramid, no mastaba, not even a modest monument. Among his recorded remarks are the following notable statements:

"The sarcophagus turned out to be empty, despite the royal seal and full burial equipment." and "There is no superstructure of any kind above the tomb."

This discovery gave rise to the hypothesis that the tomb was symbolic—a site for conducting the funerary ritual in the absence of the deceased's actual remains.

Author's commentary:
The case of Hetepheres's tomb provides significant evidence that, within the framework of the pyramids as state-driven projects with socio-economic and integrative functions, greater importance may have been placed on the public performance of ritual than on the physical burial itself. Funerary constructions may have primarily served social and economic purposes: legitimizing power, stimulating national development, consolidating community identity, and organizing state structures.

Considering that Cheops himself authorized this burial as ritually complete, one may assume that symbolic tombs were part of a conscious, controlled ritual-state strategy. The tomb existed, the ritual was performed, and society received a clear signal that the obligation toward the deceased queen had been fulfilled.

This case can be interpreted as the beginning of a dynastic tradition of symbolic tombs, continued by later generations—including in the form of the Great Pyramids. Notably, no confirmed royal mummies have ever been found inside the three Great Pyramids—those of Cheops, his son Khafre, or his grandson Menkaure—further supporting this hypothesis.

Of course, one could speculate that Cheops, despite initiating this model, changed his mind and chose to be buried in his own pyramid, and that his body was later stolen. Yet, in the context of the situation he directly orchestrated, it seems more plausible that he remained faithful to his own principles—and that neither his remains nor those of his descendants were ever placed inside the pyramids.

This does not contradict the funerary function of the pyramids, but rather points to a tradition of symbolic burials. The monumental scale of these structures suggests that their primary purpose was societal and governmental organization, rather than a literal burial in the modern sense.

Moreover, the fact that the tomb of Cheops's mother—though empty yet fully furnished—remained undisturbed for thousands of years and its secret (or tradition) was never revealed, may have served as confirmation for Cheops and his successors that symbolic burial was an effective and enduring model of ritual—for eternity.

7. Monumental Construction Supported Not Only Cult but Also State Restoration

Source: Christina Geisen. "Restoring the Order of Maat: Tutankhamun's Restoration Stela in Context." *Journal of Egyptian History* 7(1–2), 2014, pp. 93–120.

After the death of Akhenaten and the collapse of his monotheistic reform, the young pharaoh Tutankhamun ordered the reinstatement of traditional rituals, cults, and temples. However—as noted by Egyptologist Christina Geisen of the University of Basel—these actions were not purely religious in nature. In her analysis, Geisen points out that the restoration of temples, priesthood, and cult practices served not only religious purposes, but also economic and social ones:

"The restoration of temples, the priesthood, and cults served not only religious purposes, but also economic and social ones—the reconstruction of state structures."

In light of this interpretation, the Restoration Stela should not be viewed merely as a piece of royal propaganda, but rather as a manifesto of a comprehensive program to rebuild the state after a period of crisis. The reactivation of cults signified not only a return to traditional beliefs but also to institutions, redistribution mechanisms, resource management, and employment systems. Religion thus functioned as a vehicle for administrative and economic reform.

From the perspective of the present theory, the case of the Restoration Stela constitutes strong evidence that religious actions in ancient Egypt simultaneously fulfilled operational, integrative, and economic functions. The restoration of the state did not occur through cult as an end in itself, but through religious instruments used to mobilize resources and reestablish systems of governance. This approach is directly analogous to the pyramid project as a state-driven investment.

8. Restoration of Order Through Centralization and Resource Allocation

Source: Nozomu Kawai. Lectures on Tutankhamun's Restoration Stela (c. 2020–2023), including presentations for ARCE – American Research Center in Egypt.

Japanese Egyptologist Nozomu Kawai, professor at Kanagawa University and former research fellow at institutions such as UCLA and the Griffith Institute in Oxford, emphasizes in his analyses of Tutankhamun's Restoration Stela that the reinstatement of cults and the transfer of resources to temples were primarily aimed at social stabilization and the reconstruction of state structures. As he states:

"Egypt's wealth was once again handed over to the temples and the aristocracy. The restoration of cult stabilized social order and reinforced statehood."

This statement does not focus on spiritual aspects but rather highlights the actions of the administration at the time as part of a deliberate policy of redistribution—intended to restore order following a period of instability. Kawai interprets these efforts as an attempt to rebuild mechanisms of power through the redistribution of resources and the reactivation of central institutions.

This interpretation aligns seamlessly with the thesis that the pyramids had an economic and integrative character—as redistributive state projects which, like Tutankhamun's restoration, served not only ideological purposes but also the practical goal of reestablishing social order. Kawai demonstrates that behind the symbolic façade lay operational measures designed to rebuild state authority and promote social cohesion.

9. Centralization, Resource Accumulation, and Redistribution as the Foundation of Egyptian Statehood

Source: Kathryn A. Bard. "The Emergence of the Egyptian State." In *The Oxford History of Ancient Egypt*, ed. Ian Shaw, 2000.

Kathryn A. Bard, professor of archaeology at Boston University, emphasizes that the formation of the Egyptian state was inextricably linked to the emergence of a centralized apparatus of governance—capable not only of accumulating resources but also of managing their redistribution along the entire Nile Valley. A key statement from Bard reads:

"The formation of the state depended on the development of a centralized administration, capable of collecting resources and redistributing them along the Nile Valley."

According to Bard, this administrative structure preceded fully developed religious institutions and functioned through the construction of granaries, irrigation canals, and communication infrastructure. These material expressions of state organization enabled the government to effectively oversee agricultural production, store surpluses, and manage resources systematically. Within this framework, the pyramids can be interpreted as the culmination of this logic—monumental, highly visible logistical and organizational centers that simultaneously served to mobilize labor and to manifest the power and capability of the state.

The construction of the pyramids required precise planning, scheduling of seasonal labor, provision of food, tools, and technical supervision—therefore involving

the execution of a full redistributive cycle, wherein society provided labor and the state returned care, compensation, and integration.

From this perspective, the pyramids do not merely align with the logic of centralized rule; they become the physical embodiment of the very process that Bard identifies as the foundation of Egyptian statehood. Their monumental scale reflects not only mortuary cults, but also the success and symbolic visibility of the redistributive structures on which Egyptian civilization was built from its earliest days.

10. The Pyramid as a Social Engineering Project and Tool for Labor Organization

Source: Jean-Pierre Adam. *L'architecture civile et militaire de l'Égypte ancienne.* CNRS Éditions, 1999.

Jean-Pierre Adam, a French architect and Egyptologist affiliated with CNRS, specializes in the technical analysis of ancient Egyptian construction. His research focuses on engineering aspects such as the use of ramps, labor force planning, spatial organization, and the logistics of material transport. His approach deliberately avoids religious interpretations, emphasizing instead the practical dimensions of executing large-scale construction projects.

Adam stresses that the realization of monumental structures like the pyramids required the coordinated effort of thousands of people, an extensive infrastructure (including roads, storage facilities, and food distribution systems), and centralized oversight. As he states:

"The construction of the pyramid was an act of collective organization. It cannot be understood without reference to the administrative structure and division of labor in the Egyptian state."

His analysis reveals a vision of the pyramid not merely as a sacred monument, but as an instrument of social engineering—designed to mobilize, organize, and integrate the population. Monumentality was neither accidental nor purely symbolic; it was a deliberate tool for consolidating power structures and redistributing labor on a national scale.

In this way, Adam provides a solid technical foundation for the thesis that the pyramids served organizational and economic functions—as central hubs for managing resources and human capital, rather than simply places of worship or burial.

11. Pyramid Construction as a Tool for Restructuring Social Hierarchy

Source: Adam Kaiser. "Building Up to a Point: The Political Economy of Pyramid Construction in Dynastic Egypt." *SSRN* [preprint], 2024.

Adam Kaiser, a scholar affiliated with the University of California, Santa Cruz, presents an analysis of pyramid construction within the framework of the political economy of ancient Egypt. In his thesis, he states:

"The pyramids may have functioned as a tool for redistributing wealth within society. Through the transfer of resources from the elite to state laborers, the monarch strengthened central authority and reduced dependence on the priestly centers in Lower Egypt."

This approach reinforces the premise that the pyramids functioned as instruments of economic policy. According to Kaiser, royal power deliberately used monumental construction projects to restructure the social order—weakening the autonomy of influential priests and enhancing control over the populace through the provision of material benefits.

In line with this interpretation, the pyramids were not merely religious undertakings, but tools of modernization and state centralization. They operated as vehicles of redistribution, making them closely comparable to modern concepts of public infrastructure investment aimed at reducing social inequality and reinforcing centralized authority.

12. The Symbolic Nature of Tombs and the Secular Functionality of Monuments

Source: Salima Ikram. *Death and Burial in Ancient Egypt*. Cairo: American University in Cairo Press, 2003.

Salima Ikram, professor of Egyptology at the American University in Cairo and a respected expert in funerary practices, analyzes cases of secondary burials, empty tombs, and symbolic rituals. Her research challenges the widespread assumption that monumental tombs always served sepulchral purposes.

In one of her key reflections, she points to the potentially intentional symbolic character of such structures:

"Some monumental tombs may never have contained a body. Their purpose was to demonstrate the presence and power of the deceased—not necessarily their physical presence underground."

Her analysis invites a broader perspective on pyramids—not only as burial structures, but also as instruments of legitimation, power projection, and social cohesion. Their form and monumentality may have been more significant than the actual burial.

Ikram further examines the technical aspects of construction—logistics, labor organization, and planning—highlighting them as part of the administrative system. This approach aligns with interpretations in which pyramids are viewed as components of a broader state project aimed at integration, control, and redistribution.

13. Redistribution Enabled Egypt's Economy to Withstand Agricultural Downtime

Source: David A. Warburton. *State and Economy in Ancient Egypt: Fiscal Terminology of the New Kingdom*. Fribourg University Press, 1997.

David A. Warburton, an independent scholar (formerly affiliated with CNRS and the University of Copenhagen), provides a detailed analysis of fiscal terminology and the functioning of the ancient Egyptian economy in his monograph. He clearly states:

"The Egyptian economy was based on the control and redistribution of goods by central state institutions, rather than on market exchange."【2】

This fundamental observation shows that the state not only centralized power but also assumed distributive functions typical of modern public institutions. In this context, pyramid construction may have served as an ideal mechanism of redistribution—utilizing surplus resources during periods of seasonal agricultural inactivity, organizing mass employment, and legitimizing the pharaoh's role as the guardian of social order.

Such a perspective brings ancient Egypt closer to the model of a state investing in public infrastructure (with pyramids serving both practical and propagandistic purposes)—a concept consistent with modern economic theories of redistributive economies.

14. Architecture as a Tool of Hatshepsut's Power

Source: Joyce Tyldesley. *Hatchepsut: The Female Pharaoh.* Penguin Books, 1998.

Joyce Tyldesley, an Egyptologist affiliated with the University of Manchester, in her monograph on one of the most unusual figures in Egyptian history—the female pharaoh Hatshepsut—emphasizes that the monumental architecture of her reign had a significance far beyond the ritual dimension of cult. As she writes:

"Hatshepsut's monumental architecture served to consolidate power and organize society through employment and infrastructure development."

This statement highlights not only the propagandistic, but above all the operational function of the buildings erected during Hatshepsut's reign. The temple complex at Deir el-Bahari was more than just a place of worship—it was a state-driven economic project that engaged thousands of workers, ensured the distribution of resources, and reinforced social order. Tyldesley shows that Hatshepsut governed through construction—expanding infrastructure and stabilizing the state through the mass mobilization of human and material resources.

Though several centuries separated her from the era of the pyramid builders, the principles of state control remained the same. Whether a temple, pyramid, or palace was being erected, the mechanism was identical: power used architecture to build community, legitimize authority, and control the distribution of labor and goods. This is a timeless phenomenon which—as noted in the theory of Jacek Krzysztoń—has persisted in various forms into the modern era.

Hatshepsut's actions offer a clear example that monumental architecture in Egypt functioned as an instrument of internal policy—serving not only ideology, but tangible processes of social and economic integration. Tyldesley's views strongly resonate with Krzysztoń's theory, which frames pyramids and other megastructures as institutional tools for managing society within the framework of state strategy—regardless of period, structure type, or ruler in power.

15. Akhetaten as an Example of a Centrally Planned State Investment

Source: Barry Kemp. (University of Cambridge; Egyptologist, Professor Emeritus), *The City of Akhenaten and Nefertiti: Amarna and Its People.* Thames & Hudson, 2012; Marianne Eaton-Krauss (independent researcher; Egyptologist), 2022 – urban analyses of Amarna.

During the reign of Pharaoh Akhenaten, the city of Akhetaten (modern-day Amarna) was built from the ground up as the center of the new cult of Aten. While formally a religious project, there is strong evidence that it also had an economic purpose. Barry Kemp, Egyptologist at the University of Cambridge, describes the construction of Akhetaten as a venture that required massive mobilization of people and resources: laborers, craftsmen, suppliers, and architects. The city included an entire production and artistic infrastructure, and artisans were integrated into designated districts. The temples of Aten served not only as places of worship but also as centers of production and distribution. The city functioned as a planned industrial-ideological hub.

Marianne Eaton-Krauss, an independent scholar specializing in Amarna's architecture, argues that the construction of Akhetaten may have been a veiled

program of redistribution and social stabilization—using religion as a justification, Akhenaten could efficiently manage employment and resources on a national scale.

In this context, one observation by Barry Kemp is particularly telling:

"For ordinary people, religion was not the driving force of daily life; it was ritualized, distant, and controlled by the state."

These words clearly indicate that religion in Amarna was not an end in itself, but rather a tool of state power—used to organize society, production, and redistribution. From the perspective of the theory of pyramids as instruments of economic development, Akhetaten represents a particularly explicit precedent: a monumental religious project that functioned integratively and productively in practice. It suggests that the pharaoh may have deliberately designed such structures not merely as religious objects, but as tools of internal policy and public economy.

16. A State Based on Exchange: Labor for Care, Food, and Stability

Source: John Baines. "Kingship, Definition of Culture and Legitimation." In *Ancient Egyptian Kingship*, E.J. Brill, 1995.

British Egyptologist John Baines, professor at the University of Oxford, in his analysis of the functioning of the pharaonic state, highlights the fundamental principle of reciprocity between the ruler and society. As he writes:

"Social relations were based on reciprocity: labor in exchange for care, food, and a sense of stability."

In his view, the system did not rely on violence or overt religious coercion, but on a form of unwritten social contract: the people were expected to work for the state, and in return, the pharaoh provided security, nourishment, and protection. It was a redistributive economic model—not one based on profit or a free market.

From this perspective, the pyramids appear as both physical and symbolic manifestations of that agreement: monumental state projects that offered employment, sustenance, and participation in something greater than the individual. Although no formal tax system existed in the modern sense, participation in construction projects may have functioned as a form of public tribute—exchanged for goods and stability.

Baines's statement thus supports the thesis that the pyramids were more than tombs—they served as instruments of social integration, economic redistribution, and the legitimization of power. They created a structure of exchange between the state and its people, embodying a social contract within the historical context of ancient Egypt.

17. Monumentality as a Tool of Mobilization and Legitimation of Power

Source: Joseph A. Tainter. *The Collapse of Complex Societies.* Cambridge University Press, 1988.

Joseph A. Tainter, an American anthropologist and professor at Utah State University, in his analysis of the collapse of complex civilizations, draws attention to the critical role of large-scale state investments. As he writes:

"The monumental form of the pyramid was a tool of legitimation and resource mobilization—a record of state agency."

According to Tainter, monumental constructions were not merely symbolic expressions of power—they were primarily instruments of its practical execution. Through such projects, the state demonstrated its ability to organize, manage, and redistribute resources in a controlled and systematic way. Monumentality thus became a visible and tangible manifestation of the strength of state institutions, their endurance, and their capacity to unify society around a common purpose.

In this view, the burial itself was not the primary goal, but rather the organizational process surrounding the construction—this was what served to maintain social, economic, and psychological order. According to the new theory, the tomb's form could serve as ideological justification—legitimizing the message directed to society by the state apparatus. The priestly narrative of the tomb acted as a cover that enabled mass mobilization without resistance—a propaganda mechanism that made the entire operation socially acceptable.

Tainter therefore shows that monumentality in architecture was not a luxury or extravagance, but a functional instrument of statecraft—essential for preserving cohesion and continuity.

In this light, the Egyptian pyramids were not merely buildings, but elements of a social management system carved in stone: enduring, tangible evidence of state agency, and a tool of communal integration through collective labor.

18. The Pyramids Absorbed Surplus Labor, Stabilized Conflicts, and Strengthened Communal Bonds

Source: Jared Diamond. *Guns, Germs, and Steel: The Fates of Human Societies.* New York: W. W. Norton & Co., 1997.

Jared Diamond, professor of geography and biology at the University of California, Los Angeles (UCLA), in his analysis of the formation of state structures and monumental investments, observes:

"Seasonal surplus labor was utilized by ancient states for public projects, such as the Egyptian pyramids, which unified society and advertised the power of the state."

In his view, the pyramids functioned not only as symbols of divine rule, but also as practical tools of societal management. Rather than allowing the population to remain idle during agricultural downtimes, the state redirected their energy into preplanned projects—monumental, spectacular, and requiring precise organization. This strategy not only reduced the risk of unrest or social crises but also reinforced a sense of unity and belonging to a powerful state entity.

Diamond points out that such projects functioned as a kind of social buffer—they absorbed surplus labor and goods that, if left unmanaged, might lead to tensions. The pyramids, as a "state project," thus represented a form of preventive social control, channeling collective energy toward stabilization. At the same time, their monumental and highly visible form served a propagandistic role, affirming the strength of the ruler, the organization, and the state itself.

This interpretation fits perfectly with the concept of the pyramids as instruments of redistribution and societal integration, rather than purely sacred tombs. It supports the thesis that pyramid construction was a deliberately designed socio-economic mechanism—addressing Egypt's specific demographic and economic needs, including seasonal labor surpluses, trade limitations, and the need to maintain unity following the unification of Upper and Lower Egypt.

Jared Diamond's perspective fully aligns with the theory proposed by Jacek Krzysztoń, presenting the pyramids as a state instrument for labor redistribution, social integration, and the consolidation of power through the absorption of surplus labor.

19. Administrative Documents as the Key to Understanding the Function of the Pyramids

Source: Stephen Quirke. *The Administration of Egypt in the Old Kingdom: The Highest Titles and Their Holders*, Golden House Publications, London 2005.

Stephen Quirke, an Egyptologist affiliated with University College London, specializes in the study of administration and power structures in Old Kingdom Egypt. In his work, he provides a detailed analysis of official titles, papyri, and bureaucratic records, emphasizing that these sources—rather than religious inscriptions—are crucial to understanding the true function of the pyramids within the state system. As Quirke notes:

"The central administration during the time of pyramid construction operated a network of local officials responsible for resource collection, labor supervision, and transaction records—it resembled more an economic ministry than a religious institution."

His analysis reveals a picture of the state as a highly organized administrative machine, in which every element—from granaries to labor overseers—served to support massive building projects. The pyramids, therefore, were not merely outcomes of religious devotion but products of planned, secular management of resources and manpower.

Quirke's conclusions strongly support the interpretation that the pyramids were part of state infrastructure—tools of social and economic organization rather than purely sacred monuments. This perspective underscores the role of the administrative apparatus in shaping the physical and institutional landscape of Old Kingdom Egypt and lends weight to the theory that pyramid construction was fundamentally an expression of statecraft and resource coordination.

20. Economy and the Theater of Power as the Pharaoh's Main Tools

Source: Kara Cooney. *The Good Kings: Absolute Power in Ancient Egypt and the Modern World*, National Geographic, Washington 2021.

Professor Kara Cooney from the University of California, Los Angeles (UCLA), analyzes pharaonic power as a complex system in which ritual, politics, and economics formed a cohesive structure. As she observes:

"Religion was only one part of the system—the main tools were economic and political control."

Pharaonic authority was not based solely on religious belief—it was deeply rooted in resource management, logistics, and the redistribution of labor. Massive state-sponsored projects, such as pyramid construction, were integral to this mechanism. Their purpose extended beyond the sacred sphere: they were instruments of economic and social policy that reinforced social cohesion and legitimized rule. Cooney emphasizes:

"Royal power is theater, economy, and religion—it is never just one of these."

In her interpretation, monumental architecture functioned like a stage—a political theater on which the pharaoh demonstrated agency, competence, and mobilizing power. This spectacle was both ideological and practical. As Cooney incisively states:

"It wasn't about religion. It was about who had the means to impose that religion on others."

From this perspective, pyramids were not the result of religious fanaticism, but rather calculated instruments of societal management—symbolic yet functional systems for expressing authority, organizing labor, and redistributing state resources through collective effort. Their monumental presence communicated stability, strength, and the unity of the Egyptian state under a central power.

21. It Was the Pyramids That Built Egypt—Not the Other Way Around

Source: Zahi Hawass. "The Pyramids Built Egypt," *AUC Press Blog*, 2024.

Dr. Zahi Hawass—one of the most recognizable Egyptologists, former Secretary General of Egypt's Supreme Council of Antiquities, and a prominent public advocate for Egypt's heritage—summarized the essential role of the pyramids in Egyptian history with striking clarity in a 2024 article:

"It was the building of the pyramids that built Egypt. It was a national project involving the entire society, organized by the government, which provided food, shelter, and care."

Hawass's statement is among the strongest affirmations of the view that pyramids were not merely sepulchral structures but *institutions in stone*—visible evidence of a functioning state, its administrative capacity, and its responsibility for its people.

As an archaeologist with extensive experience managing excavations and documentation at Egypt's most important sites, Hawass brings to this debate not only academic insight but also field-based authority. His voice carries particular weight in the field of Egyptology and underscores the idea that the process of pyramid construction shaped the very fabric of Egyptian civilization—politically, economically, and socially.

22. State Projects as a Response to Crisis and a Tool for Social Integration

Source: John Maynard Keynes. *The General Theory of Employment, Interest and Money.* London: Macmillan and Co., Limited, 1936.

John Maynard Keynes, economist and professor at the University of Cambridge, in his groundbreaking work *The General Theory of Employment, Interest and Money*, argued that in times of crisis, it is the government's responsibility to stimulate the economy, create jobs, and generate demand – even through activities of seemingly limited utility.

As Keynes famously wrote:

"**The government could employ people to dig holes and fill them up again – or to build pyramids.**"

Though this statement was delivered with a touch of irony, it reflects a profound insight: **that the process of construction itself can hold significant economic and social value, regardless of the final outcome.**

Keynes emphasized that public investment – including infrastructure projects – could restore employment, counteract stagnation, and rebuild a sense of purpose and cohesion in society. In this light, the construction of pyramids in ancient Egypt may be interpreted not solely as a religious project, but as a state-led initiative intended to stabilize and unify the country, particularly after the unification of Upper and Lower Egypt.

Such undertakings provided work, integrated dispersed communities, and strengthened central authority through the tangible redistribution of resources. The pyramid – from this perspective – becomes a tool of deliberate economic policy, a strategy for managing labor surpluses, and a channel for social stabilization through collective effort.

Thus, pyramid-building can be seen as a **prototype of Keynesian economic policy**: a government-led stimulus program aimed at activating unused social potential. Just as Roosevelt's *New Deal* in the 20th century mobilized the unemployed and reorganized social structures, so too might the pyramids have served as a grand state impulse – giving people purpose, enforcing social order, and legitimizing power, even under the guise of religious devotion.

23. Pyramid Construction as a Tool for Social and National Integration

Source: Mark Lehner. *Neighborhoods to Nation: The Giza Plateau Mapping Project.* Boston: Ancient Egypt Research Associates, 2019.

Mark Lehner, one of the most prominent contemporary Egyptologists and director of AERA (Ancient Egypt Research Associates), has led decades-long archaeological excavations on the Giza Plateau. His work has focused not only on the architecture of the pyramids themselves but more significantly on the functioning of the workers' settlement at Heit el-Ghurab.

In one of his most recent analyses, summarizing the outcomes of this extensive project, Lehner highlights the political and social dimensions of labor organization:

"Our work suggests that the inhabitants of Giza were deliberately mixed according to origin in order to create new social bonds."

This intentional intermixing of laborers from different regions of Egypt—both Upper and Lower—was a strategic act. The pyramid construction project served not only as a logistical and architectural enterprise but, more importantly, as a tool for shaping a new, integrated national identity.

The organization of daily life—shared housing, uniform diet, synchronized labor rhythm, and collective participation in a state-sponsored project—was aimed at reducing regional antagonisms, linguistic and cultural differences, and fostering unity under the common authority of the pharaoh.

Lehner not only demonstrates the state's intention to integrate its population but also provides empirical data showing how this integration was implemented—through the spatial layout of the settlement, food supply infrastructure, labor systems, and social conditions.

From the perspective of Jacek Krzysztoń's theory, this model of labor organization reveals the core function of pyramid construction: not as a result of religious ideology, but as a practical state instrument for resource redistribution, social integration, and the forging of Egyptian national identity following unification.

24. The Pyramids as Part of the Operational Infrastructure of the State

Source: Andreas Winkler. "The Pyramids: Not Just Sacred, but Economic?" *The Conversation*, 2019.

Andreas Winkler, an Egyptologist affiliated with the German Archaeological Institute in Cairo, presents an alternative perspective on the function of the pyramids—one that aligns closely with the theory of their socio-economic role within the Egyptian state. As he states:

"The construction of the pyramids was not only a religious undertaking, but also a means of activating an organized system of labor and logistics, based on the exchange of resources and work for food and state-provided care."

According to Winkler, the Egyptian state created a system in which work on monumental construction sites was not merely a religious duty or cultic act, but a form of social exchange: labor was mobilized seasonally, and in return, the population received material and social support. This interpretation confirms that the pyramids served as administrative tools—centers of labor coordination, resource redistribution, and population management.

In light of this analysis, the pyramids take on a new dimension as state infrastructure—beyond their sacred character, they functioned as operational hubs. The model of "labor in exchange for security" bears strong resemblance to modern

systems of social welfare and public investment programs. Winkler's thesis contributes meaningfully to the contemporary reinterpretation of architecture as a means of governance and control in pre-industrial states.

25. Ancient Rulers Replicated Time-Tested Models of Management and Organization

Source: Michael E. Porter. *The Competitive Advantage of Nations.* New York: Free Press, 1990.

Michael Porter, professor at Harvard Business School and creator of the theory of competitive advantage, analyzes the phenomenon of so-called *clusters*—the geographic concentration of interrelated sectors, institutions, skills, and infrastructure that mutually reinforce one another and drive regional development. According to Porter, key state investments can initiate such structures, fostering an environment conducive to innovation, specialization, and the growth of social capital.

He emphasizes:

"Competitive advantage arises from local circumstances—conditions that foster innovation, specialization, and long-term investment in both social and physical capital."

In this context, the pyramids—as vast infrastructure projects involving specialists, administrators, logisticians, farmers, and artisans—may have laid the foundations for an early administrative-economic cluster based on labor organization, resource management, knowledge exchange, and social integration.

Thus, they were not merely isolated monuments, but could have functioned as the core of ancient development clusters—promoting long-term stability, the consolidation of state structures, and the redistribution of goods.

It is important to note, however, that the cluster was not an end in itself, but rather a natural byproduct of the scale and organization of these investments—a secondary yet enduring result of their socio-economic function.

26. Elton Mayo – Labor as a Source of Social Bonds and a Tool for Integration

Source: Elton Mayo. *The Human Problems of an Industrial Civilization.* Cambridge, MA: Harvard University Press, 1933.

Elton Mayo, an Australian psychologist and sociologist, professor at Harvard University, is regarded as one of the founders of the human relations approach in management. As a result of his research conducted at the Western Electric Company (the so-called Hawthorne experiments), Mayo demonstrated that people engage in work not only for financial reasons but also for a sense of community, belonging, and recognition. He emphasized that collective labor fulfills emotional and social needs, forming a foundation for social stability. As he wrote:

"Man is not a rational economic being—he is primarily a social being."

Within this framework, participation in monumental construction projects such as the pyramids can be interpreted as a form of collective activity that integrated Egyptian society by organizing it around a common goal. Mayo's theory supports the hypothesis that pyramid building functioned as a deliberate political and social instrument, designed not only to establish physical structures, but also to cultivate interpersonal bonds—and thereby reinforce the stability of pharaonic rule.

27. The Pyramids as a Tool of Planning and Governance and a Result of Effective Administration

Source: Michael J. Wenke. *Patterns in Prehistory: Humankind's First Three Million Years.* Oxford: Oxford University Press, 2007.

Michael J. Wenke, an archaeologist and professor at the University of Washington, in his foundational work on the emergence of social and state structures, analyzes ancient Egypt as a model state founded on centralized and planned economic systems. He places particular emphasis on the role of labor mobilization and resource management as core drivers of civilizational success. In one of his key observations, he states:

"Egypt succeeded through planned economy and labor mobilization—the pyramids were an expression of administrative agency."

Wenke does not view the pyramids as isolated cultural phenomena, but rather as integral components of a broader system of social management—deeply intertwined with agricultural seasonality, resource availability, and the need for political integration. In his view, the construction of these monumental structures was the outcome of a state's administrative capacity to coordinate tens of thousands of people around a common project—one that spanned not months, but decades.

In this framework, the pyramid was not an end in itself, but a means: a tool for coordinating society, a manifestation of effective authority, and a system capable of utilizing labor surpluses, ensuring logistics, and maintaining citizen discipline.

It is organization, not ideology, that becomes the key to understanding the phenomenon of Egyptian statehood, according to Wenke.

From the socio-economic perspective of pyramid theory, Wenke's analysis stands as one of the strongest empirical arguments: he attributes Egypt's success not to cultic practices, but to its ability to construct a functional state apparatus. In this interpretation, the pyramids are not only symbols of royal prestige but also tangible instruments of economic planning, social organization, and civil order—exactly as proposed by the redistributive and integrative theory of their function.

28. Monumental Structures as Instruments of Social Organization and Control

Source: David Wilkinson. *The Power of Monuments in Ancient Civilizations.* New Haven: Yale University Press, 2004.

David Wilkinson, a political scientist and historian of civilizations at the University of California, Los Angeles (UCLA), who specializes in the role of architecture in social processes, emphasizes:

"Monumental structures were tools of spatial and psychological governance—they organized society."

In his view, pyramids were not merely evidence of technical ingenuity, but components of a system for managing collective behavior—both symbolically and practically. Their massive scale, visible from great distances, and their geometric order shaped perceptions of social hierarchy and order. The presence of such structures in the Egyptian landscape had a lasting psychological effect—reinforcing the legitimacy of authority and societal stability.

The internal organization of the pyramids, along with their role as focal points within settlement layouts, provided direction and meaning to collective action. In this context, monumental architecture functioned as a cornerstone of statehood—alongside the military and bureaucracy—serving as a tool of integration, discipline, and governance. The pyramids thus fulfilled not only an ideological role, but also an operational one, acting as physical manifestations of strategies for social control and state organization.

29. The Pyramid as a Political Message Directed at Society

Source: Toby Wilkinson. *The Rise and Fall of Ancient Egypt.* London: Bloomsbury, 2010.

Toby Wilkinson, Egyptologist and professor at the University of Cambridge, draws attention to the function of pyramids as a form of political messaging. He writes explicitly:

"The pyramid was not merely a tomb, but a political statement of power, reach, and control—a monument directed as much to the living as to the dead."

This statement challenges the classical view of pyramids as purely sepulchral structures. According to Wilkinson, their monumental form and central placement were primarily intended to influence society—to serve as testimony to the authority of the ruler, the state's organizational capability, and the extent of its control.

From the perspective of the socio-economic theory of pyramid function, this observation directly supports the claim that the goal of pyramid construction was not limited to caring for the deceased king, but also aimed at propaganda, integration, and political influence on the living. The pyramid—as a political declaration—was a tool of power, legitimizing the state structure in the eyes of its subjects.

30. Resource Redistribution as the Basis of Economic and Labor Organization in Egypt

Source: Juan Carlos Moreno García. *Land and Power in Ancient Egypt: The Structure of Land Tenure, 3rd–2nd Millennium BC.* Cambridge: Cambridge University Press, 2012.

Juan Carlos Moreno García, a scholar affiliated with the French CNRS (Centre National de la Recherche Scientifique), emphasizes:

"Trade appears as an underestimated phenomenon, in which markets, private merchants, and agrarian 'entrepreneurs' drove exchange (...) **independently of any institution—including temples or the crown."**

According to his analysis, the key mechanism of the Egyptian economy was redistribution managed by the state, rather than an institutional monopoly held by the priesthood. The authority of the pharaoh was based on the central administration's ability to manage land, production, and labor—not through religious control, but through the economic organization of society.

In this context, the pyramids acquire new meaning as physical instruments of redistribution: they mobilized vast human and material resources, required precise logistics, and provided social stability—in exchange for obligations toward the state.

These monumental projects were not merely propaganda tools—they were economic investments that integrated society, mobilized labor, and controlled the flow of goods.

Summary

A review of the collected evidence—from archaeological discoveries to historical and economic analyses—reveals the pyramids in a new light. Taken together, all the presented arguments suggest that the Great Pyramids of Egypt were not merely monuments of faith or royal tombs, but rather served specific and deliberate functions within the framework of the state.

First, they operated as instruments of redistribution and a means of absorbing surplus labor. The seasonal mobilization of thousands of workers for construction channeled social energy into productive effort, while providing people with sustenance (in the form of food, clothing, and shelter) in return for their labor.

Second, they served an integrative and identity-building function. The construction of the pyramids brought together people from both Lower and Upper Egypt, fostering bonds across regional divisions and reinforcing a shared sense of participation in a great national enterprise.

Third, they acted as tools of political legitimacy and ideological communication. Their monumental scale testified to the effectiveness of central administration and the power of the ruler—the pyramids stood as material proof that the pharaoh could organize and maintain order throughout the entire country. Importantly, religion was not dismissed but subordinated—serving as a supportive element within the broader organizational and societal framework.

The analysis thus presents the pyramids as institutions situated at the boundary between the sacred and the secular—places where ritual met economic planning. From the tomb of Queen Hetepheres to the workers' cities in the shadow of the pyramids, and even to modern Egyptologists' declarations such as *"it was the pyramids that built Egypt"*, all evidence consistently supports the interpretation put forward by Jacek Krzysztoń.

In this view, the pyramids become more than sepulchral monuments: they are the very embodiment of the ancient Egyptian state model, the material realization of its economic, social, and ideological strategy.

Conclusion

In light of the sources presented, it becomes increasingly difficult to maintain the claim that the pyramids were merely tombs, and that their socio-economic function was nothing more than a side effect of large-scale construction. A new interpretive paradigm is emerging: the pyramids as a central element of the pharaohs' deliberate domestic policy. This perspective does not diminish the religious significance of these monuments but instead highlights their dual

nature. For the ancient Egyptians, the Pyramid of Khufu was likely both a "stairway to heaven" for the king and a school of social cooperation here on earth.

This new interpretation makes the pyramids even more fascinating: they were the socio-economic laboratories of their era—projects that built Egypt, just as Egypt built them. Continued development of this interdisciplinary perspective—combining archaeology, economic history, and political theory—not only deepens our understanding of the pyramid phenomenon, but also allows us to draw broader conclusions about the mechanisms behind the formation of civilizations.

The monuments of the past cease to appear merely as enigmatic relics—they become legible records of how power organized people around a shared (though not always consciously understood) purpose.

The thirty points presented here represent a selection of the most compelling evidence from a broad corpus of academic research. In reality, many other voices—from Egyptology, economics, sociology, and anthropology—support this interpretation, even if they do not always name it explicitly.

The goal of this analysis was not only to gather arguments, but to organize them logically and synthesize them in a way that reveals an underlying, coherent idea: that the Great Pyramids were above all instruments of societal organization—not just symbols of transcendence. This document opens the door to further interdisciplinary research and the search for new analogies across other ancient civilizations.

Endnotes (1-3)

1. In ancient Egypt, a system of seasonal labor for the state (known as *corvée*) was in place, particularly during the annual inundation of the Nile. Although it was obligatory, it did not constitute slavery—those who participated received food, care, and shelter. In practice, this labor functioned as a socially accepted form of public service, and for many, it was also a means of survival during the agricultural off-season.

2. The application of a redistributive economic model—as described, for instance, by Karl Polanyi—suggests that the ancient Egyptian state played the role of the primary intermediary in the collection and distribution of goods, providing subsistence to citizens in return for labor in service of the ruler. In David Warburton's interpretation, this mechanism becomes clearly visible and aligns with Polanyi's concept of a centralized, "household-based" pre-market economy.

3. Mark Lehner's analyses of the workers' settlement at Giza point to the existence of a centralized system of employment, food logistics, and human resource management. Although Lehner himself does not formulate a general theory about

the socio-economic purpose of pyramid construction, his decades of research under the Giza Plateau Mapping Project suggest that the settlement operated as an integrated center of collective labor. He notes, for example, the deliberate mixing of workers based on their regional origins—an observation that may indicate intentional social integration, consistent with the thesis that the pyramids functioned as instruments of state consolidation following the unification of Egypt.

Author

Jacek Krzysztoń is an economist, entrepreneur, and independent researcher, known for developing the theory that the Great Pyramids of Egypt were built primarily as socio-economic development projects. He is the author of several books on economics, business, and real estate, including *Egyptian Pyramids: Big Tombs or Big Business?:* https://www.amazon.com/dp/8396765642

His theory also inspired the documentary film *The Pyramids – Tools of Power*, available on YouTube: https://www.youtube.com/watch?v=xw17_BcBB_Q

Main source document: *The Great Pyramids of Egypt – Tombs or Primarily a Socio-Economic Development Project?*, published on Zenodo.org (DOI: 10.5281/zenodo.15858488)

Author's Note

This evidentiary essay is not a comprehensive review of all interpretations regarding the function of the pyramids, but rather a deliberate and purposeful compilation of evidence supporting a single, innovative theory: that pyramid construction served primarily a socio-economic function, rather than a purely funerary one.

This theory was developed through observation and logical reasoning, and subsequently confronted with the statements of scholars affiliated with leading academic institutions. The thirty selected examples are not intended to represent the full spectrum of opinion, but rather to demonstrate that there is a sufficient basis for viewing the pyramids from a new perspective.

The traditional sacred interpretation is not rejected here—but rather repositioned, placed in the background in favor of a socio-economic function that may have been the original driving force behind these monumental projects. The religious function, in this view, served to legitimize the enterprise in the eyes of society, given the immense scale of resources and labor involved.

I encourage open debate and welcome evidence to the contrary—for it is through the dialogue of competing theories that truth ultimately emerges.