

NOT A KING, WHEN THE SYSTEM IS A RULER: A SYSTEMS-FUNCTIONAL ANALYSIS OF THE INSTITUTIONAL INTERLOCK IN THE INDUS VALLEY CIVILIZATION

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Abstract

This paper presents the Systems-theoretical framework of the Indus Valley Civilization (IVC). The study frames the IVC social system under the AGIL framework with four elements (Adaptive, Integrative, Goal-oriented, and Latency). This paper argues that IVC presents a complex social system. The civilization sustained itself without any centralized political authority. IVC operated through a heterarchical system of governance. Unlike the monarchies in other civilizations such as Egypt and Mesopotamia. The study argues that social order in the IVC emerged from the interdependence and interlocking of social institutions. A qualitative synthesis was applied to the archaeological literature synthesis. The paper examines how family, economy, religion, politics, and education collectively function and achieve AGIL in the IVC. By describing each social institution separately, the paper found connectivity: although each social institution has its own functionality, it overlaps with others, strengthening them; together, the system itself rules like a ruler in the IVC. The study concludes that authority in the IVC resided in the system itself: a heterarchical, self-regulating network of institutions that governed society without kings or centralized power.

1. INTRODUCTION:

The Indus Valley Civilization (IVC), also known as the Harappan Civilization, remains a mystery in human history. Due to the language system's relatively unexplored nature, its entire social structure remains largely unknown. It is important to note that during its mature phase (2600–1900 BCE), the IVC covered approximately 1,500 kilometers; today, it spans Pakistan, India, and Afghanistan. (Kenoyer, 1998; Mughal, 1990). The total area IVC controlled was much larger than that of its contemporary civilizations, including Mesopotamia, Egypt, and ancient China (Possehl, 2002). Not only a vast area of land, but also the population, estimated to be one to five

million people, who were residing in both rural settlements and urban centers (Kenoyer, 1998).

Unlike other civilizations with a clear central controlling authority, the IVC maintained and managed its vast territory through a decentralized system. There is no clear evidence of monarchy, kingship, or political authority in the IVC. Since their legacy continued to grow and prosper for over 700 years, posing a sociological puzzle: how did such a large civilization last for hundreds of years without any defined political power?

Society operates through various social institutions, such as family, religion, the economy, politics, and education. Although each institution has its own distinctive specification, they do not operate in isolation but rather form

a connected system. The history of IVC is not static but has undergone many changes over time, divided into phases such as Early Harappan, Mature Harappan, and Late Harappan. That reflects that the system of social institutions could also change across phases.

Many studies on the IVC treat these institutions separately, with a special focus on archaeology, but very few explain their social connectivity. This paper is a scholarly effort; a move from archaeology to sociology. That is a sociological interpretation of archaeological evidence. This analysis examines how these social institutions were linked and how this connection helped the civilization remain stable, cooperative, and resilient. What was the true governing system: their economic system, their family, their beliefs, or something else, maybe an integrated social system? To explore these, we must analyse all five social institutions of society: politics, economy, family, beliefs, and socialisation, distinctly, yet collectively.

Literature traditionally relied on excavation and the discovered artifacts to answer these questions. IVC theories were largely shaped by learning from specific sites, particularly the large cities of Harappa, Mohenjo-Daro, Kalibangan, and Lothal. A paradigm shift in IVC's understanding was observed, driven by the discoveries of Dr Mohammad Rafique Mughal. Mughal is a Pakistani ethnoarchaeologist who significantly diverted the focus of archaeologists to other centers parallel to these Big Two: Mohenjo-Daro and Harappa. During his massive landscape archaeological survey, the Cholistan expedition, he found that the dry bed of the Ghaggar-Hakra River, this river once linked with the mighty Sarasvati River in ancient texts (Misra, 1993; Oldham, 1893). Mughal found it to be the most densely populated area of the IVC by discovering over 400 sites along the Hakra River. By adding these new entries to the IVC league, he named the region "Greater Indus Valley" and introduced the concept of spatial integration in IVC.

The spatial settlement is a geographically spread of settlements, but logically linked, with its integrated system functioning as a single network

(Mughal, 1997). Mughal explained its spatial spread. Green, Schug et al., and Vidale strongly believed that, given its massive number of stakeholders and colonies across the IVC, it should be a heterarchical system, rather than a hierarchical one. Hierarchy believes in top-down power, such as a kingdom. Heterarchy, the opposite of hierarchy, is a system of interlocking social interdependencies (Green, 2022; Schug et al., 2013; Vidale, 2018).

2. AGIL AS THEORETICAL FRAMEWORK:

The famous sociological scheme, the Systems Theory, is adapted as a theoretical framework for this analysis. The classical sociologist Talcott Parsons introduced the theory of Structural Functionalism in his most famous book, *The Social System* (Parsons, 1951). Parsons presented four core functions of a system essential for society to survive and thrive: Adaptation, Goal Attainment, Integration, and Latency, the AGIL paradigm. Subsystems collectively form a larger system. According to his model, it explains how different Indus cities functioned as "interdependent institutions" to maintain cultural stability over a long period without a kingdom. While Mughal (1970, 1990) identified the 'Greater Indus Valley' as a vast sphere of interaction among regional cultures, Systems Theory explains how this was possible: the civilization functioned as an interlocked heterarchy.

From a Systems Theory perspective, social institutions were the subsystems of the larger IVC system. Suppose the families acted as the primary production units, while socialization ensured standardization of skills and practices. Trade and economic activities connect society from rural to urban areas. Religion works as a normative regulator and a guide in their daily lives. Politics in IVC was a unique form of management, not about control but about coordinating these subsystems. Altogether, it presents a rare case: a Greater Indus Valley system in which family, socialization/education, economy, religion, and politics were tightly interlocked.

Niklas Luhmann, a German sociologist, conducted extensive work on Systems Theory and expanded its scope. He argued that the central focus of any society is not only the people living there, but the power that connects them: communication. He introduced the concept of autopoiesis, which is critical to understanding institutional connectivity. This claim is that societies have the default ability to self-produce, arrange, and rearrange themselves through communication (Luhmann, 1995). Subsystems have an inbuilt capacity to efficiently regenerate themselves, rather than relying on external sources to manage them. The concept of autopoiesis aligns closely with the heterarchical approach of Green, Vidale, and Schug et al (Green, 2022; Schug et al., 2013; Vidale, 2018). Combining an archaeological approach with Parsons and Luhmann, presenting an interpretation of how subsystems were interlocked in IVC through a standardized and uniform communication of seals, weights, and script. This paper offers a new perspective on the governance of such a vast civilization without a central king, yet with a heterarchical governance model.

3. METHODOLOGY

This study holds the interpretivist philosophical orientation. The theoretical approach is grounded in Parsons's sociological theory, "The Systems Theory," and the AGIL framework (Parsons, 1951). A qualitative narrative synthesis of archaeological reports, books, and highly cited peer-reviewed studies on IVC, and of sociological theories, was used as the methodological approach in this paper. The Scope and analytical procedure of this research are strictly focused on the mature Harappan phase (2600–1900 BCE) only. The literature was carefully reviewed for its relevance to five major and basic social institutions: family, education, politics, religion, and economics.

4. CONCEPTUALIZATION OF SOCIAL INSTITUTIONS AS A SUBSYSTEM-AGIL

I. The Institution of Family in IVC- A Domestic Sub-System (L-Latency)

Family is a fundamental and prime unit of any human society. Likewise, the IVC's social system relied on the family as its foundation. Researchers consistently agreed on the essential role of family not only in daily life but also in economic activities. The theories of family and family life in IVC suggested a joint and extended family system rather than a nuclear or small family (Kenoyer, 2006, 2012; Thapar, 1975; Wright, 2010). Excavations in big cities and rural settlements revealed a trend toward large courtyards commonly used in households across IVC sites. The courtyard holds significant importance in household life; on the one hand, it serves as a storage space, a bathing area, and a cooking area, and also provides a joint social space for family gatherings and discussions, as well as a children's socialization area (Possehl, 2002; Ratnagar, 2001; Wright, 2010)

Interesting facts indicate a much more uniform and repetitive household structure, with slight variation but a similar domestic architecture template, across the broadest range of IVCs, making IVC even more mysterious. How did such a large civilization internalize and practice the same architectural rules in its house building? That also indicates not a localized belief system but a shared, logical belief system across cities, families, and peripheries (Mughal, 1990; Mughal, 1997). Since the primary function of any family is reproduction, in IVC Harappan families, reproduction occurred both biologically and economically. The family in IVC was the basic economic unit in the civilization and acted as an active producer. Goods manufactured in households were traded with other civilizations as part of an economic network (Miller, 2015). This shows that the foundation of the trade system in IVC with other regional cities was not due to factories and a state-supported production system, but to households and their shared courtyards (Vidale, 2018).

Artifacts found in houses primarily consisted of tools related to production activities, such as the

use of shell and beads as raw materials for pottery and jewelry-making. Kenoyer and other scholars argued that household production tools indicate high participation by men and women in economic activities (Kenoyer, 1998; Miller, 2007; Ratnagar, 2001). A clear gendered division of labor was observed in IVC. Domestic tools and craftwork provide evidence of women's high participation in household management, textile production, and jewelry making (Chase, 2018). Men mainly engage in physical labor, craftwork, and trade. So here again, as in traditional society, we find a distinction between men's and women's gender roles: indoor and outdoor management, even though both engage in economic activities. Researchers refer to this interdependence as the process of cooperation and mutual economic contributions toward system stabilization (Biagi, 2004; Chase, 2018; Ratnagar, 2001).

In an edited book, Pakistani archaeologist Dr Farzand Masih has conducted a significant study of the residential patterns of the IVC in the Punjab region of Pakistan. By examining the placement of hearths and spinning whorls, he argues that the family was organized along gendered lines (Masih, 2018). This made the family a self-sufficient economic unit. Caspers, E. C. L. D. (1992) discussed figurines and contextual interpretations of gender roles in Harappan society, and the active participation of women in ritual activities. It is important to note that this interpretation of gendered performance and participation is based on the discovered artifact, although there is no direct textual evidence on whether women played a role in leadership in the IVC (Biagi, 2004; Caspers, 1992).

After conducting a biological study at Rakhigarhi, Dr Vasant Shinde and his team posit that the IVC family structure was a clan system. Families have remained in their households for generations, and they are biologically related. As a multigenerational population, they were closely bound and interconnected within a social system based on ancestry. They pass on the same profession to the next generation through socialization and skill transmission, leading them

to remain in the same locality permanently rather than migrate (Shinde, 2019).

Another Indian seal and script expert, Mahadevan, presented an interesting theory. He argued that the IVC clan system can be understood through the animal symbols on seals. That served as a family signature or legal identity for trade and economic agreements. The Unicorn, the Elephant, the Bull, and the Fish were specific identification marks for different clans or families (Mahadevan, 1977). According to Systems Theory, families, as the self-regulating sub-system of the biggest system, were the smallest repeating units that reproduced the larger social order in IVC.

II. The Institution of Socialization in IVC- A Transmission Sub-system (L-Latency)

As discussed in the family subsystem, the courtyard served as a multi-purpose space in a household. One of the most significant roles of a courtyard in the IVC was the children's socialization. Where the skills of production and handicrafts were transmitted to the new generation, along with social norms and values (Kenoyer, 2006). Although there is no evidence of any formal place of education at IVC sites, like a school, similar to what we observed in Egypt and other civilizations (Possehl, 2002).

In the IVC, education was not an external force imposed on society, in which skills were formally granted to children; instead, it was embedded in household activities. These activities not only trained children for their social life but also for their economic performance. Apprenticeship was an ancient teaching method, learning by doing, from simple to complex. In IVC, children started with simple tasks, such as helping parents and sorting beads, and gradually progressed to more complex processes, including the actual making of beads (Kenoyer, 2012). How did the children of IVC get their skills and education?

The evidence of toys found in excavations tells the story; toys were tools of play, but also a means of socialization and education in the IVC. Dr Shereen Ratnagar is one of India's most distinguished archaeologists. She critically analyzed the role of toys in children's

socialization, finding a fundamental connection between these toys and the long-standing, stable social setup, with its standardized culture (Ratnagar, 2001). As the socialization focused on the internalization of culture in children, they played with toys or engaged in mimicry. All created cultural mental maps and the internalization of culture in children while they were playing. Thousands of terracotta toys were found in various sites of houses, including miniature carts, whistles, animals, and figurines (Kenoyer, 1998; Ratnagar, 2001). These toys served as a medium for the internationalization of the social blueprints of their society. In her book, *Understanding Harappa*, Ratnagar (2001) discusses the consistency and uniformity of these toys across the IVC's different geographies, but with the same pattern. That suggests a shared cultural mental map, in which the socialization of children to the standardized principle was the key factor in the formation of a consistent society for many years (Ratnagar, 2001). This trend explains the uniform standardized system of weights, house construction, and seals across the region, and how these standards travelled intergenerationally (Kenoyer, 2006; Mughal, 1990).

Himani found these toys gender-neutral because the figurines had flat chests and few gender markers. She also noted that figurines are not merely static dolls but illustrate action and performance, such as nursing, dancing, and farming. Here, these toys communicated two things to children: first, active tools for learning and internalizing social identities at a young age; secondly, their expected roles in society (Himani, 2022). Researchers also debate whether some figurines, such as the mother goddess, serve dual roles as toys and religious figures. The interpretation was made on two distinctive logics: researchers found mother goddess figurines in household debris rather than in a public place, and the same material and terracotta were used in these mother goddess figurines and other toys. That indicates these toys served to transmit the belief system to children within the domestic sphere.

Under AGIL, latency is a function of pattern maintenance, and it transmits cultural values through the family unit and socialization (Parsons, 1951). In the IVC, this was achieved through two means: toys and mimicry. Mimicry, or the chameleon effect, is a form of learning that involves mirroring the social environment (Chartrand, 1999; Ratnagar, 2001). The children of IVC learn skills and social behaviors from their surroundings as they play with thoughtfully designed toys and role-play. The ultimate target was to socialize children and future generations.

III. The Institution of Religion in IVC- An Integrative Sub-system (Integration)

Religion in the IVC was not confined to a specific sacred area of worship but was expressed in daily life, making the IVC's religion "The Religion of the Everyday" (Wright, 2010). From family and economic dealings to urban planning and sanitation. From their socialization system to their politics. From their trade system with other parts of the world to the tinny toys in a small family unit, their religious beliefs were tightly intertwined. All subsystems were connected to a deep belief system that provides a framework for their lives. Repetitive daily religious practices ingrained religious norms in themselves (Wright, 2010). Since the religious system was automated through their daily practices, that routine made the powerful subsystem of politics. A system without resorting to external, formal coercive power.

An efficient sanitation system with covered drainage was incorporated into their urban planning, with each house connected to the main drainage system. While the evidence of private wells at the household level shows two remarkable practices related to their faith in water. First, their perception and practice of cleanliness; second, their strategic management of water, considering it a sacred natural element for purification. The importance of the water element was also evident in almost every house, as families often had their own wells and private bathing areas. In the existence of a private pool, the presence of Greater Bath in Mohenjo Daro, as many scholars argued, was not merely a fun

place or to take a bath, but a public space for religious rituals for collective cleanliness, and potentially, to achieve spiritual purification, what Sir Marshall believed, a holy bathing (Marshall, 1931; Possehl, 2002). Presenting water and a bath pool in both the house and public places shows how their domestic, civic, and religious behavior were closely intertwined.

The literature shows an interesting region-wise division in religious rituals: whereas in the Western part, currently Pakistan, sites such as Harappa and Mohenjo-Daro, the rituals focused on water (Possehl, 2002). Just opposite it, in the Eastern part of IVC, current India, the focus was on fire and a mix of both, but in sequence: water, then fire. S.R. Rao (1973) identified diversity in religious attitudes. While studying Kalibangan and Lothal, he found fire altar platforms on the citadel at Kalibangan. These altars, which contained ashes, charcoal, and terracotta, were built too close to the well to facilitate the fire or sacrifice ceremony (Rao, 1973). They were significantly different from the cooking stations: the cooking altars contained food remains, while the fire altars contained animal remains and bones, indicating sacrificial rituals at the site. As Rao (1973) noted, the two-way process of scarification is first cleaned with water and then burned on fir altars.

Considering the natural elements of water and fire, IVC had a deep spiritual connection to nature. where people were highly aligned with its principles of nature. Water, animal, and meditation, many seals reflect their ideology. That is explicitly seen in the famous IVC seal no. 420, *Pashupati*, discovered during the initial excavation of Mohenjo-Daro under the supervision of Sir John Marshall. The seal depicts a three-faced male figure in a yogic posture, in a root-lock pose. This is one of the earliest representations of Yoga and Meditation in human history, indicating that yoga was already developed in ancient times. He was also wearing a high, horned crown, as seen in the horned caps (polos) of Mesopotamia and the Hemhem Crown of Egypt, both of which were associated with divinity (Black, 1992; Wilkinson, 2003). In IVC, some interpretations also state that it is a sign of

divine energy and social status (Himani, 2022). The meaning of Pashupati is "lord of animals," as he is surrounded by large animals, such as a rhino, a buffalo, and an elephant, as well as wild animals, such as a tiger. Sir John Marshall coined the term Proto-Shiva for this seal, as it is the earliest form of Shiva, which later evolved into a Hindu religion (Marshall, 1931). However, the discussion on Pashupati continues and will continue until the IVC script is deciphered. (Parpola, 1994; Possehl, 2002).

Another expression of the IVC belief system was the discovery of thousands of figurines. Researchers argue that they are not dolls for children in the house, but represent the Mother Goddess, a symbol of religion and fertility; both earthy and able to grow food, they symbolize growth in the family. Given the smoke stains on the mother goddesses, it is believed that these terracotta figurines were common in household contexts (Fairservis, 1975; Marshall, 1931). Here, we observe two arguments: some scholars believe these figurines were used as tools for children's socialization and moral training, while the counterargument holds that the role of these mother goddesses in the household remains unclear and views them as mere toys (Possehl, 2002).

Likewise, other forms of social practice were highly standardized, such as uniform burial practices, evident in IVC. Since there are no Great Pyramids of the Indus or royal tombs, unlike other civilizations. Kenoyer compared IVC burial practices with those in Egypt and Mesopotamia, where the gap between the elite and commoners was vast; elite graves were filled with valuable goods to showcase the status of the God-King. But Cemeteries across the IVC reflect the equality in death, as the Harappan people often did not bury their valuables (Kenoyer, 1998).

IV. The Institution of Politics in IVC- A Governance Sub-system (G-Goal Attainment)

In its literal meaning, politics is all about the exercise and distribution of power. According to the sociological understanding of power, as Max Weber argued, it is the ability of an individual or

a group to carry out their will (Weber, 1978). Most ancient civilizations had a well-defined hierarchical system in which power was concentrated at the top of society. Generally, the concept of politics in ancient civilizations depicts a powerful king or Pharaoh, proud and adhering to elite protocols, who exercises his authority and maintains social order through his army. IVC, even though it was huge in total area and comprised densely populated patches across its territory, showed no evidence of a big boss. Neither any king nor his kingdom, nor any sign of giant temples or palaces; instead, there was a quiet social system.

Since IVC was a No-King case, how can we explain the status of kings, such as Pashupati and the Priest-King, as figurines (human-like in shape)? In the early analysis, although Sir Mortimer Wheeler (1968) described these as "The King" and a "Priest-King," modern scholars interpret this differently; for example, Parpola and Kenoyer prominently presented a localized interpretation. Initially, these figurines look king-like but not kings. These symbolize the elderly clan leaders or religious leaders. The rationale for this interpretation is the absence of royal symbols on these figurines, such as crowns, thrones, and weapons. The horned headdress seen on Pashupati does not mean a crown, but a ritual headdress. It also suggests that political doctrine in IVC was heavily shaped by religious belief, or that religion was a political power in their everyday politics and civic behaviour. Linked with this argument, the reinterpretation of other animal seals served as a family signature or totemism as political identity in the IVC (Parpola, 1994). Where the Unicorn appears alongside the ruling elite, as this symbol was found almost everywhere in the IVC, it may represent administrative authority or the most powerful clan. Similarly, the Bull represented the merchant class, which was authorized to manage trade and the economy, while the Elephant and Tiger, found at some specific sites, indicated their regional authority (Mahadevan, 1977; Parpola, 1994).

Similarly, for citadels, which were initially perceived as forts, as were other forts in

Mesopotamia and Egypt (Wheeler, 1968). Modern reinterpretations found that these citadels were the centres of civic gatherings and communal factions, such as the collective rituals of the cleaning ceremony at the Great Bath. The same goes for the Granary, a structure for mass food storage in surplus (Lal, 1997). Considering the case of the citadel, we can observe that power in the IVC is divided and shared among three parties: the ritual leaders, the merchants, and the administrators. The administration for resource management, the ritual leaders for regulation, and the Merchants for economic activities, all together, contributed equally and comprised a heterarchical system (Wright, 2010).

As Gregory Possehl mentioned, some unique characteristics of a heterarchical culture include decentralized power but corporate governance. A society where decisions were made with the shared interests of diverse groups of that society (Possehl, 2002). For instance, different segments of society, comprising merchants, ritual leaders, and farmers, work together under their shared ideology as a corporate system. Given the board of directors' modern setup, IVC serves as a body of corporate governance (Kenoyer, 1998; Ratnagar, 2001).

A society where every decision, like how wide the streets should be, what the size of a brick should be, was made with an agreement and consultation between different powerful families. IVC has rare political arrangements in which power travels not from up to down, vertically, but is distributed horizontally. The phenomenon scholars recognized as heterarchy, or unranked power, in which power is not centralized but distributed across many power blocks (Crumley, 1995; Mughal, 1990; Possehl, 2002; Vidale, 2018). We can understand this system with the modern political theory by Halberstam, which he called 'constitutional heterarchy, where order or decision is made through a continual negotiation between regional or individual groups, such as those in the European Union (Halberstam, 2009).

One of the strong pieces of evidence of this heterarchical political system is the uniform layout of urban cities. Interestingly, while cities

were geographically located hundreds of miles apart, there was a similarity in layout plans, grid systems of streets, and the exact measurement of bricks: 1:2:4. The city's uniform development indicates political integrity, showing a decentralized implementation of a central management body.

Dr. Farzand Masih highlighted the civic behavior of people in these centers and the similar physical layouts of the cities, which required conformity in the social behavior of their inhabitants (Masih, 2018). He recognized the level of cooperation among IVC's different cities and the people of IVC as a "civic-minded" population. IVC's People prioritized communal hygiene over individual convenience. Masih also claimed that these high-level management functions would not be possible with a single authority but would require decentralized power blocks, such as sectoring and localized governance (Masih, 2018).

V. The Institution of Economy in IVC- An Adaptive Sub-system (A-Adaptation)

The IVC's territorial expansion and retention were driven by its economic activities. Kenoyer's work indicates the strength of their networks; it was not focused on wealth accumulation but rather on social ties. (Kenoyer, 1998). These networks connect rural settlements with urban centres, forming trade and industrial and production zones. These networks can be understood through Mughal's work in the Cholistan Desert (Mughal, 1997). Mughal discovered a dendritic structure in which small villages were connected to cities, like branches on a tree. Considering the Hakra River a highway, which provided logistical support for these networks. So, the large towns were connected to smaller village-based production units via the Hakra River, creating a complex trade network. Mughal is also credited with discovering Ganweriwala, a lost capital located in Cholistan, no less in size than Mohenjo-daro and Harappa. This indicates how frequently city centers were established in the IVC to manage its peripheries and served as economic hubs for trade and administration.

From a political and economic perspective, it shows that the IVC's weapon was not a sword but a scale. Like the standardized weighting system, the linear measurements were also found uniform. The standard linear scale is referred to as the Indus Inch (Mainkar, 1984). As they exercised their power through their production and distribution networks, their standardized measurement and management were closely linked to cosmological principles (Kenoyer, 2010). These ideological standards regulate their economic activities within the vast IVC. Besides ideology, the management of this enormous economic system requires formal documentation, trade routes, institutional trust among merchants, communication, rules, and farmwork, especially for long-distance trade (Lahiri, 1992).

Rao discovered a sophisticated port system with larger warehouses and a massive number of trade seals at the Lothal dockyard, identified as the first human-made basin, with an efficient management mechanism (Rao, 1973). Where the merchant group was responsible for delivering sealed, quality-checked products to regional and international markets (Miller, 2015).

Branding is evident in the IVC economic system, where people were connected through a shared identity (Chase, 2018). The identity of individuals was not invisible in the external sense; it was physically expressed through seals on their hands as brand logos. The utilization of the same seals created the sense of sameness among them. That also glued them to each other and to the brand as a whole (Chase, 2018). It seems that people in IVC valued their system and, each day, voted for its politics by using their identity through a specific seal, tools, toys, and a shared ideology and behavioural pattern of sameness (Miller, 2015).

At the micro level of the economy, studies found a direct connection between a village family and the international standing of its products, from the courtyard to the regional market. These revolutionary findings were reported in an archaeological excavation in Gujarat, India, at the site of Nageshwar. Hegde et al. (1992) revealed that these villages were 100% dedicated

to shell-working, including the production of bangles and other products. As we observed in the figurines of the dancing girl, wearing a stack of 24 to 25 bangles on her left arm and 4 on her right (Hegde, 1992; Kenoyer, 1998). They weren't independent producers; they were "nodes" producing massive quantities of standardized, technologically advanced goods for international trade (Vidale, 2000). Here we can analyze their supply chain system: they produce at their local sites and village industries, transport hundreds of miles to the "Warehouses" Rao described at Lothal, and then distribute to the regional market.

5. INTERLOCKED SOCIAL INSTITUTIONS (AGIL FRAMEWORK)

From the AGIL perspective, no single institution fulfilled a single function; instead, each institution contributed concurrently to a larger societal goal, such as adaptation, goal attainment, integration, and latency. In IVC, family, economy, religion, education, and politics continuously reinforced one another. Here, we analyse this institutional setup using the AGIL Model, developed by the classical sociologist Talcott Parsons (1951).

A for Adaptation in AGIL:

In Parsons' AGIL model, adaptation is the ability to cope with the external environment by acquiring, producing, and distributing resources within the specific context of its social system. Here, the system is the interlock institutions, but in the case of IVC, the critical point of adaptation is the context: climate, geography, and other civilizations.

The adaptive function of the IVC, managing, producing, and exchanging resources, was simply about the economic institution; however, it was deeply embedded in other social institutions of the household and socialization. For instance, the production of craft items, such as bead-making and shell-working, was primarily carried out in households, where the family was considered a manufacturing unit. That's a family institution that also transmits economic skills to its children through household-level apprenticeship. So, here

we can see that economic adaptation was achieved through the integration of three social institutions: family, socialization, and the financial system.

The adaptation further intensified through political regulation and the stabilization of standardized economic activities and tools. From the weighing system to scale measurements, all extents of production were uniform across the regions. The political system provided cooperation and coordination between rural and urban. These standard measurements were not taught in any formal setting, but rather through family socialization aligned with the family's belief system.

Here, we identified another social institution, religion, as a regulator of norms and values. This nexus can be mapped through which IVC successfully practices adaptation: family, education, politics, religion, and economy. It is important to note that when IVC struggled to adapt, it lost the interlocking system of social institutions, which contributed to its decline.

i.G for Goal Attainment in AGIL:

Traditionally, "Goal Attainment" is a Puzzle in the IVC. In the absence of a visible king, it was hard to tell, without a leader, what the goal of that civilization was or what they wanted to achieve. In the case of the IVC, the goal was not an order from a single authority but a collective interest in maintaining and sustaining the civic equilibrium.

The goal of social stability was to ensure that each social institution continued to function with perfection and coordination. Archaeological evidence shows their shared civic goal through collective regulation in their urban planning and development. Goal attainment was related to their political institutions, and their political goals were achieved through their standardized economic mechanisms and the management of economic networks. Their political administration successfully connects households and the economy under the framework of their belief system. Religion served as a regulator of formalized civic responsibilities and their moral ethos.

Here we can analyse the connection of the individual to the collective goal of society via the glue of religious sameness; in part, belief diversity, but coordination and cooperation were practised. So, goal attainment in IVC was achieved without any ruler through interlocking and equilibrium among family, socialization, economics, religion, and politics.

ii. I for Integration in AGIL:

It can be understood as a religious institution effortlessly. Integration in AGIL concerns the regulation of the relationships among different social units in a society to enable it to run as a whole system. In the IVC, religion played a central integrative role. It consolidates family life with economic practices and civic and normative behaviour.

Religion was not an external phenomenon but embedded and programmed in their internal selves, as well as practiced in their homes as part of their daily routine. Even children were closely connected to their belief system through their toys, where they socialized around norms and morals while playing. They were not separate from their play, socialization, religion, and family, all of which blended to transmit values. In the same pattern, they prepared to be integrated into society's macro framework.

Observing their rituals again, the integration of many social aspects is evident. Their public health practices, with covered drainage and sanitation for each house, demonstrate their civic responsibility and health consciousness, as well as their rituals involving water, which they consider holy. For instance, similar to collective ritual, the Great Bath connects religion with its political infrastructure. Their seals, embedded with religious symbols, were used as toys and, more specifically, for trade combines; religion and economy were mixed. In IVC, not only was religion responsible for integrating the social order, but also all social institutions, politics, family, and economics, all together not spared from their belief system.

L for Latency in AGIL:

In the context of this paper on the IVC, latency is the answer to the key sociological puzzle: how did a civilization sustain itself with uniformity and consistency for 700 years without a King ruling over social order? Latency is the preservation of a social system's fundamental values, rules, and identity. The family and the household in IVC performed many functions simultaneously. It was both a small production unit and a classroom for learning and moral training through their play and routine participation in economic and ritual activities. The latency function in IVC was primarily fulfilled through family and family-based socialization. Since there was no King, it may be that power is placed in the latency subsystem. The IVC family acted like a 3D Printer, printing and preserving the same values and skills in every child. By means of the toys and mimicry, as such, latency tools.

Parsons highlighted two core components of latency in System Theory: firstly, the maintenance and preservation of basic cultural patterns; and secondly, the provision of a platform for renewal, motivation, and reenergization by releasing tension, for instance, through entertainment, recreational activities, and leisure time with family. These two critical features of latency ensure the stability of society's members. In the IVC, we can map the node of social institutions for latency; first and foremost was the family, which taught its children civic, religious, and economic patterns.

Evidence, such as sameness in miniature toys of carts, performing figurines, domestic tools, and weights, explains the process of latency: through children's play, how they preserved their standardized practices, transmitted them to other generations, and sustained institutional continuity without formal schooling. Here, we can safely integrate all five institutions into one interlock: family, socialization, religion, economics, and politics.

6. CONCLUSION:

In applying Parsons' AGIL framework, our meta-analysis shows that the IVC operated as a unified

social system; as Mughal was identified as a Greater Indus. A great system, in which the five core social institutions were horizontally interlocked: Family, Religion, Economy, Politics, and Education. By answering 'so what' to the research question, our analysis describes that the lack of central power or absence of a king did not contribute to the decline of the IVC, nor did it show any shortage of leadership, but instead that it flourished the civilization through its distributed, autopoietic system of governance. Hence, this study concludes that the longest stability of IVC, was a product of Institutional Interdependency. Connecting all these dots of this analysis, this paper therefore posits that the IVC system itself was the ruler, rather than any individual king or authority.

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Glossary:

- **AGIL Framework:** A tool developed by Talcott Parsons for his theory of structural functionalism. This tool consists of the four core requirements for a society to function as a system:

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A-G-I-L, where A-Adaptation, G-Goal Attainment, I-Integration, and L-Latency.

- **Adaptation (A):** The economic subsystem, related to the capacity of a social system to get resources from its environment, process the raw material, and distribute the resources.

- **Goal Attainment (G):** The political subsystem; the capacity of a system of a society to make decisions for its set goals.

- **Integration (I):** The subsystem related to social norms and values of a society. The capacity of a society to maintain its social order with harmony, integration, and cooperation among its social stakeholders.

- **Latency (L):** The subsystem related to kinship, family, and education of a society. The capacity of a society to preserve its social identity and to maintain its cultural pattern from generation to generation.

- **Heterarchy:** A governing system with parallel ranks. Where social powers travel horizontally, not vertically.

- **Institutional Interlock:** When different social institutions are deeply interdependent, like a lock between them, they collectively develop a systematic society.

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