

THE ASWAN HIGH DAM AND THE SOCIO-CULTURAL TRANSFORMATION OF NUBIA:

Displacement, Memory and the Politics of Heritage

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Abstract

In 1954, Egyptian President Gamal Abdel Nasser announced that if the Nubian communities practised patience, the province of Nubia and the city of Aswan would be the primary beneficiaries of the revolutionary Aswan High Dam (AHD). Framed as the master design of Egypt's post-colonial modernisation, industrial growth, and Arab nationalism, the Dam successfully protected millions from catastrophic droughts and floods during the 1970s and 1980s, generated affordable hydroelectric power, and added 6 to 6.5 billion cubic meters of water to Egypt's national share. Yet, this triumph of engineering and nation-building triggered severe, multidimensional socio-cultural losses for the indigenous Nubian communities. The creation of Lake Nasser flooded ancestral lands, forcing the final displacement (*Tahjir*) of an estimated 100,000 Nubians from both Egypt and Sudan. This paper analyses the historical trauma of these dislocations across four separate instances, focusing on the 1963–1964 forced relocation to New Nubia. By synthesising ethnographic data, architectural typologies, and historical records, this study evaluates the transformation of the traditional Nubian house (*noḡ*) as a social organisation, and the erosion of communal structures (*nuiḡ*), the gendered impacts of displacement on women, and the ongoing politics of heritage. Ultimately, the paper critiques the traditional development discourse that treats human displacement as an unavoidable collateral expense, highlighting the enduring agency, contemporary transformations, and cultural resilience of the Nubian-Egyptian community.

Keywords: Aswan High Dam; Nubian displacement; Development-induced displacement; Cultural landscape; Nubian heritage; Socio-cultural transformation; Cultural resilience.

1. Introduction

Nubia, the "land of gold" (*nub* meaning gold in Hieroglyphic), historically occupied the region between the First and Third cataracts of the Nile. Its history is characterised by a succession of distinct cultural groups and external influences (Fahim, 1983; Mahgoub, 1990). The construction of the Aswan High Dam (AHD) between the 1960s and 1970s represents one of the most significant and heavily contested mega-development projects in Egypt. For the modernising Egyptian state led by President Gamal Abdel Nasser, the dam was envisioned as an existential necessity and a symbol of national sovereignty and Arab nationalism (Fahim, 1983, p. 26). Statistically, the dam as a path toward rapid industrialisation and agricultural expansion delivered on many of its promises (Fahim, 1983, p. 28). It successfully insulated Egypt from severe regional famines during two major periods of drought in the early 1970s and 1980s, offered a reliable and consistent source of irrigation, generated massive quantities of affordable hydroelectricity, and expanded Egypt's agricultural capacity by capturing an additional 6 to 6.5 billion cubic meters of water that previously discharged unutilised into the Mediterranean Sea (Mahgoub, 1990; Fahim, 1983). However, the construction of the AHD is heavily criticised for inflicting profound, multi-dimensional geographical, environmental, biological, and socio-cultural losses upon the native Egyptian and Sudanese Nubian communities (Fahim, 1983, pp. 28-13). The creation of Lake Nasser completely flooded ancient Nubian villages along the river's path, forcing the displacement (commonly referred to by Nubians as *Tahjir*) of an estimated 50,000 Nubian Egyptian people (Habbob, 2026). These populations were uprooted from their ancient riparian ecosystems and relocated to state-constructed settlements in Kom Ombo, located roughly 50 kilometres north of Aswan and hundreds of kilometres away from their original ancestral territories (Mahgoub, 1990).

This displacement was not an isolated historical event. The pattern of displacement began under British colonial administration with the construction of the Aswan Low Dam or Reservoir in 1901–1902 (Fahim, 1983, p. 26). This initial infrastructure disrupted local farming, submerged parts of historic Nubia, and prompted waves of economic emigration toward urban centres like Cairo and Alexandria, as well as south toward Khartoum (Mahgoub, 1990). The subsequent heightening of the Low Dam in 1912 and again in 1933 pushed flood lines further into Nubian territories, submerging more agricultural land and houses, and destabilising local patterns of life (Agha, 2016; Saleh, 2023).

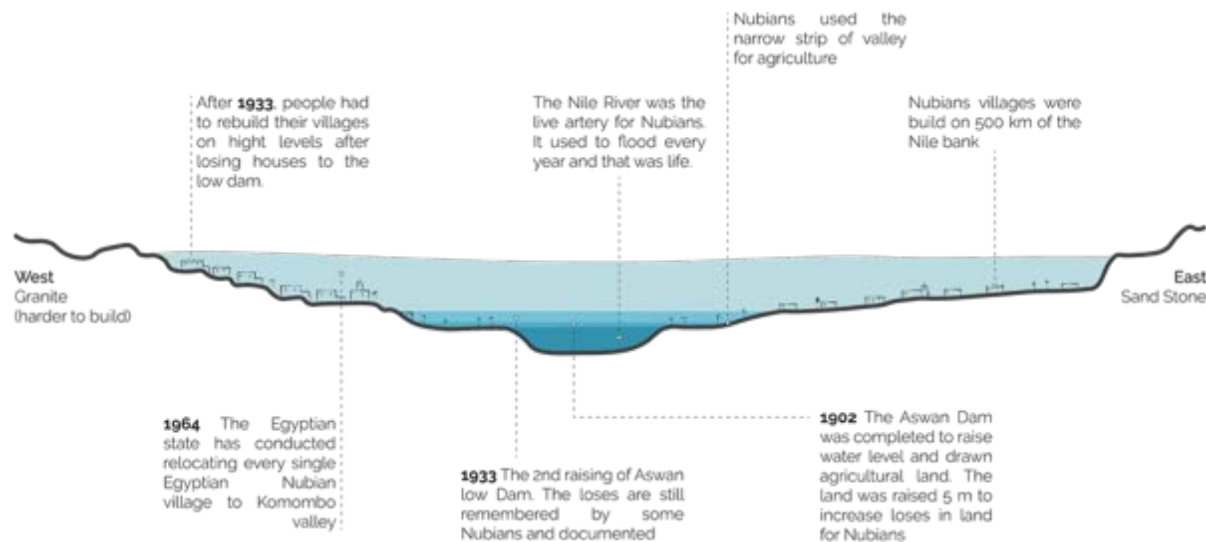


Figure 1: successive rising of the water level (Agha, 2016)

By the time the Aswan High Dam was completed, the Nubian community had already experienced forced relocation and environmental instability on four separate occasions throughout the past century. This pattern of state-sponsored displacement has led to lasting grievances related to land loss, insufficient compensation, and social marginalisation. These issues continue to shape the current relationship between the Nubian community and the central Egyptian government.

The foundational research problem addressed in this study emerges from a critical gap in existing literature regarding development-induced displacement and resettlement after the construction of the High Dam. Dominant historical narratives and the state's official discourses have long framed the loss of historic Nubian lands as a regrettable but necessary cost of national modernisation (Agha, 2016). In this context, scholarly discourse is often reduced to addressing a future physical return to the homeland as an overarching solution and the broken state promises (Saleh, 2023; Allen, 2014). This perspective overlooks the complex, everyday socio-cultural transformations, spatial and structural adaptations that have reshaped contemporary Nubian life over the successive generations following the displacement. To challenge these limited perspectives, this research answers the question of: How can understanding the socio-cultural impact of the AHD on Nubia lead to a better comprehension of the past and pave the way for informed heritage-led development? The core objective of this paper is to analyse the socio-cultural and spatial transformations experienced by Nubian communities following the displacement.

The qualitative research methodology is based on secondary data analysis of existing scholarship on the AHD and Nubia, a research method utilised since the 1960s (Kelly et al., 2024). This study examines how the radical reconfiguration of physical landscapes reshaped the intimate social fabric of Nubian life. The research draws upon two primary theoretical frameworks. First, it utilises the concept of the house as a social organisation rather than mere physical shelter, analysing how architectural forms actively construct kinship, economic safety, and cultural norms. Second, it adopts Eglash's (1998) framework of "fractal settlements," which describes how large, complex, and highly organised human settlement forms can emerge organically from smaller, decentralised units without relying on a single, authoritarian planning centre.

2. The Cultural Landscape of Old Nubia: The House (*Nōg*) as a Social Organisation

In 1998, Eglash observed that the fractal structures of traditional African settlements are not accidental; rather, they are a manifestation of indigenous knowledge systems that align with modern scientific understandings of complex adaptive systems. He explains that, by integrating social hierarchy, traditions, and architectural design into a single scaling logic, these cultures provide a unique window into the application of self-organising phenomena in human society. Therefore, fractal geometry serves as a tool for analysing complex systems, characterised by "self-similarity," in which patterns are reproduced at various scales. These patterns are not merely the result of unconscious social dynamics; they are intentional, bottom-up inventions that serve as practical techniques for social expression (Eglash, 1998). In that respect, the social and urban organisation of Old Nubia was characterised by an organic, decentralised hierarchy (Mahgoub, 1990). Dwellings were grouped into fractal geometries or patterns of hamlets known as *nūjū* (singular: *naja* in Arabic), which were collectively aggregated into larger administrative villages called *nawāhi* (Mahgoub, 1990). The spatial distribution of these *nūjū* was entirely dictated by social order, kinship, lineage, and clan relationships (Habbob, 2026). Each *naja* was visually and socially distinguished from its neighbours, as the inhabitants of a specific hamlet were almost exclusively members of the same extended clan (*qabila* in Arabic). The spatial planning of these settlements followed two distinct architectural patterns based on regional topography (Mahgoub, 1990):

- A. **The Grid Pattern:** Predominantly found in Southern Nubia (the Fadīja territory), this pattern (Figure 2a) developed on expansive, flat lands along the river. Dwellings were organised in orderly, linear rows running strictly parallel to the Nile, allowing every single household direct visual and physical access to the water.
- B. **The Free Pattern:** Characterised by Northern Nubia (the Kunūz territory), this pattern (Figure 2b) emerged in rugged, mountainous landscapes. Dwellings stood clustered atop rocky hills and high cliffs, leaving the scarce, flat, low-lying river valleys exclusively open for intense agricultural cultivation.

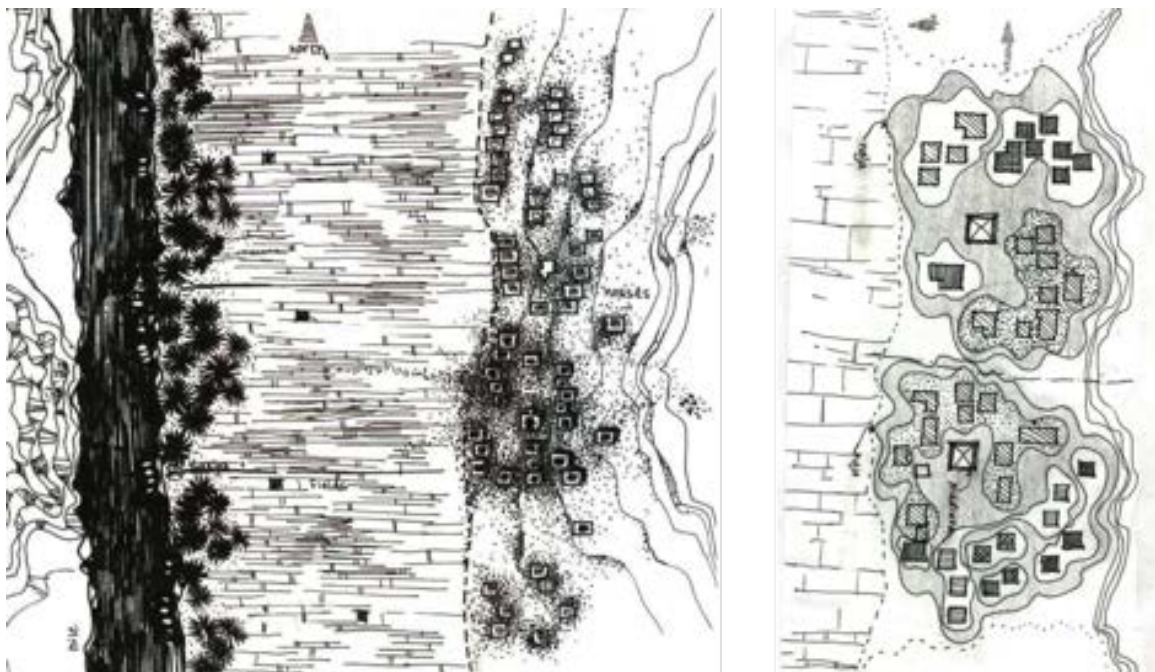


Figure 2a: Grid pattern, Figure 2b: free pattern (Mahgoub, 1990)

The settlement patterns of Old Nubia were profoundly shaped by geography and topography, adapting organically to local landscapes (Mahgoub, 1990). The Nubian people have always had a close relationship with the River Nile, which served as the essential lifeline for their population. (Fahim, 1983). These

settlements were built along a 320-kilometre stretch of the Nile banks between Egypt and Sudan, where the river's predictable annual flood cycle dictated agricultural survival, domestic routines, and spiritual rituals (Habbob, 2026). According to the 1960 Egyptian census, the total Nubian population immediately before the construction of the High Dam stood at 98,609 individuals, with approximately 50,000 residing within the Egyptian borders across 39 distinct geographic villages. This territory was characterised by an intricate and diverse ethnic fabric, featuring distinct sub-groups including the Kunūz, the Nubian-identifying Arabs, the Fadīja (Nūbi), and the semi-nomadic Ababda populations (Habbob, 2026).

The Nubian house (*nog*) (Figure 3), as analysed by Mahgoub (1990), can be considered the repetitive unit of the fractal geometries or patterns. It was at the centre of their social order. The *nog* was never conceptualised as a simple material shelter; it was an expansive, deeply valued cultural space where family customs, lifecycle festivities, and daily communal existence unfolded (Habbob, 2026). Built primarily using traditional mud-moulding techniques known as *Galous*, these houses featured walls constructed of earth and clay layers that provided natural thermal massing adapted to the scorching arid climate. The *nog* was a spacious, castle-like dwelling typically occupying over a thousand square meters and oriented toward the Nile, characterised by high, solid walls that concealed a private world organised around a large central courtyard (*boash*). The design allowed it to grow with the family over time. This courtyard served as the heart of the home, where daily activities took place in direct contact with nature while remaining shielded from strangers. Key structural elements included the *bamabah* (entrance gate), which was often decorated with china plates and mud reliefs to protect the family from the "evil eye," and the *mandarah*, a guest room that featured the only windows overlooking the outside world. A unique and vital part of the house was the *divani*, an independent bridal hall that functioned as a "house within the house" for newly married couples, ensuring social continuity and the expansion of the extended family. The construction of the house was a collective effort involving family members, neighbours, and local builders, creating a strong sense of belonging and community ownership.

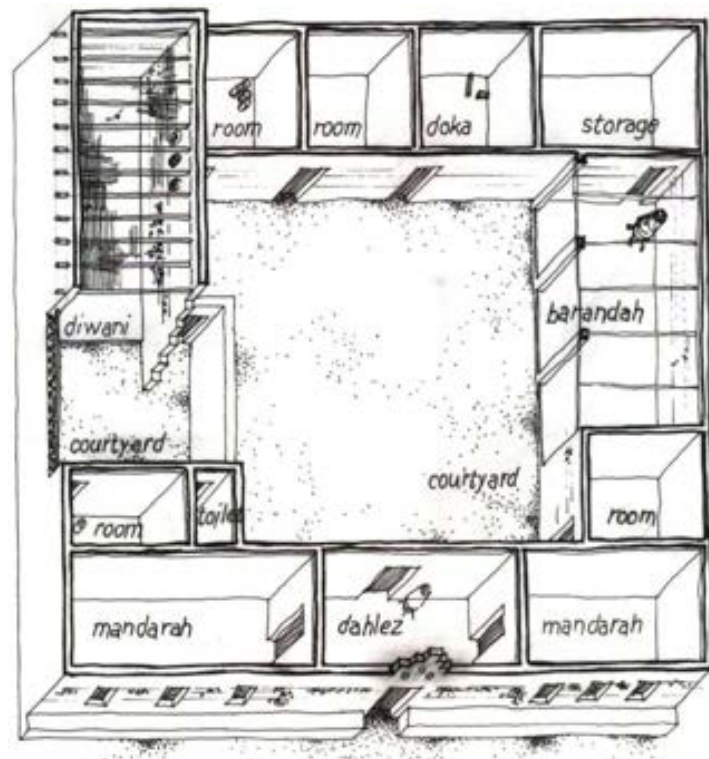


Figure 3: Typical Nubian house (Mahgoub, 1990)



Figure 4: Building with *Galous* (Mahgoub, 1990)



Figure 5: Decorated house gate, in Wadi Halfa. (Goran Schildt - Wendrich, 2025)



Figure 6: Ed-Der village around 1860, photo by Antonio Beato (Wendrich, 2025)

3. The New Nubia Resettlement and the new spatial order

The mid-1960s state resettlement plan shattered the spatial order of Old Nubia (Figure 7a), imposing a centralised bureaucratic scheme that paid little attention to local social geographies (Figure 7b). Managed by the National Organisation for Nubian Resettlement, the state engineered a rapid, top-down relocation project that compressed the community's geographic footprint. The original 39 Egyptian Nubian historical villages, which had developed organically along over 200 kilometres of the fertile Nile, were abruptly compacted into just 33 state-designed villages. These new settlements occupied a narrow, 60-kilometre-long crescent situated entirely within the desert plains of Kom Ombo, located far from the path of the Nile (Fahim, 1983; Mahgoub, 1990).

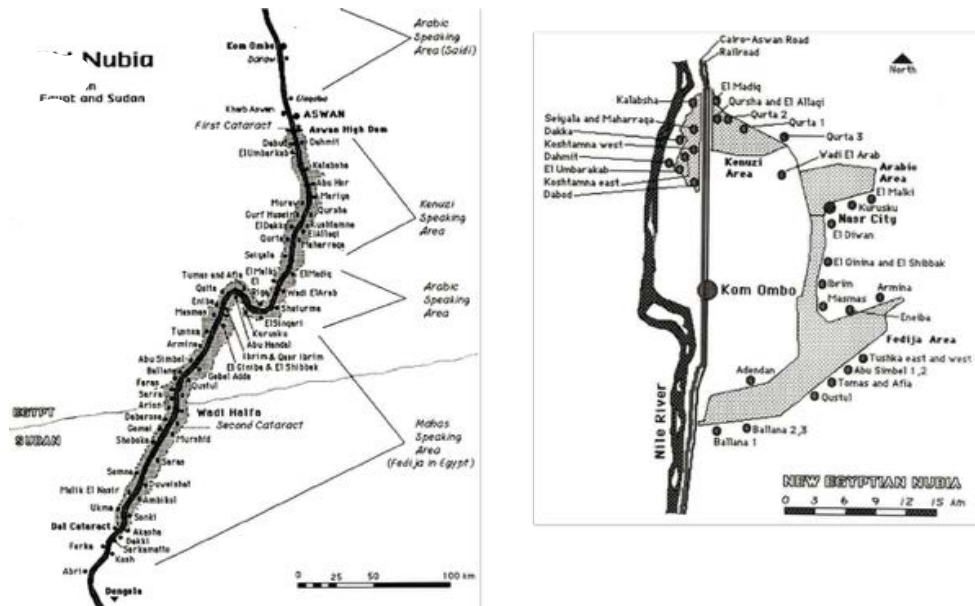


Figure 7a: Old Nubia; Figure 7b: New Nubia (Mahgoub, 1990)

In order to expedite construction and minimise state expenditures, the National Organisation for Nubian Resettlement enforced strict, industrial standardisation guidelines. The fluid, expansive architectural designs of the traditional *nog* were replaced by rigid, identical residential units based on just three state prototypes. These prototypes were assigned to families purely based on a bureaucratic headcount of rooms, regardless of clan relationships or generational needs (Mahgoub, 1990). The architectural and urban differences between the original ancestral homes and the state-constructed resettlement units can be systematically summarised across several key dimensions:

Architectural Metric	Old Nubian Vernacular (<i>nog</i>)	New Nubia Resettlement
Primary Building Material	Galous	Concrete, fired brick, and stone masonry
Spatial Organisation	An open collection of adaptive spaces based on clan lineage	Standardised, rigid 3-prototype residential models
Exterior Facade & Aesthetics	Hand-painted murals and decorated gates	Uniform, plain, unadorned state-constructed structures
Ecological Relationship	Dynamic, intimate proximity to the Nile River ecosystem	Urban form of a remote desert settlement
Density & Layout	Dispersed, custom-built hamlets (<i>nujūn</i>)	Densely compacted and uniform grid village

Table 1: Urban and architectural differences between Old and New Nubia



Figure 8: Planning of a typical New Nubian village (Mahgoub, 1990)

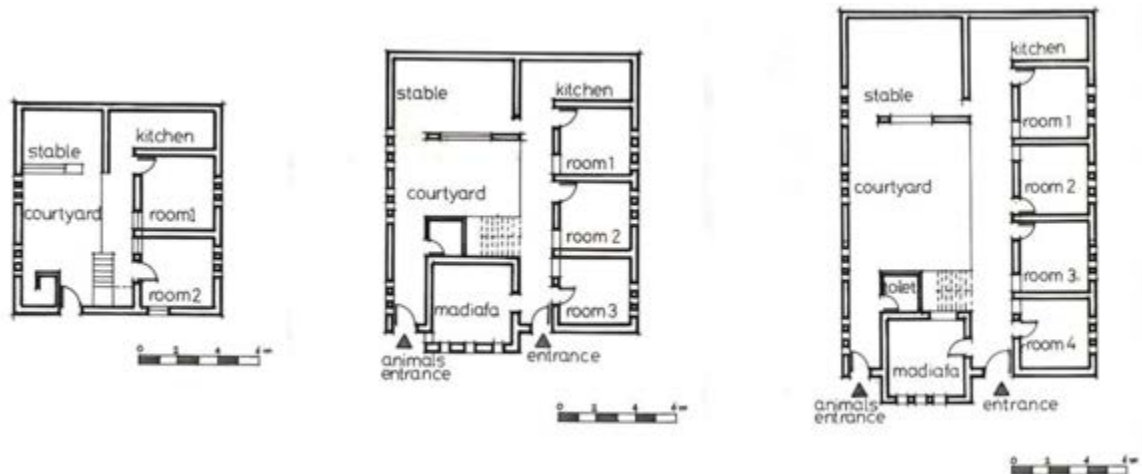


Figure 9: The three prototypes of houses in New Nubia (Habbob, 2026)

4. Multi-Dimensional Socio-Cultural Transformations

4.1 Disruption of Aman (Security) and Privacy

The move to the dense, standardised housing blocks of New Nubia directly undermined the fundamental cultural concept of Aman (profound environmental and communal security). “When we first arrived here, we used to lose our animals because we continued to leave them in the field, as we did in El Balad El Kadim/Old Nubia” (Mahgoub, 1990). In Old Nubia, Aman was maintained by the open yet protective layout of the *mijū*, where shared kinship ties ensured that every neighbour was a trusted family member. The state-constructed villages in Kom Ombo discarded these spatial buffers. Families from different clans, sub-ethnic groups, and regions were placed directly next to one another in highly compressed housing tracts (Agha, 2016; Habbob, 2026).



Figure 10: Animals outside the house (Scudder, 2016)

4.2 Fragmentation of Extended Family and Clan Systems

The bureaucratic logic of the National Organisation for Nubian Resettlement fractured the extended-family networks that formed the bedrock of Nubian social resilience. In the ancestral lands, as family branches grew, the physical layout of the *nōg* could be easily expanded. New rooms were added to the main structure using Galous, keeping multi-generational clans together within a single domestic compound. In New Nubia, this organic growth was impossible. Houses were bounded by rigid stone masonry and predefined grid lines that left no room for expansion. When young generations married, they could no longer be integrated into the ancestral home. Instead, they were forced to seek separate housing units assigned by the state, often located in entirely different parts of the village or in separate settlements altogether. This spatial separation broke down the daily routines of the extended family system, undermining the traditional mechanisms of mutual support, intergenerational childcare, and collective labour that had sustained the community for centuries (Mahgoub, 1990).

4.3 Gendered Impacts: Women's Burden

The burdens of displacement fell with particular severity on Nubian women. The state's resettlement programme was designed under the assumption that moving to Kom Ombo would open up modern agricultural and industrial opportunities, transforming men into permanent local labourers. However, these promised economic opportunities largely failed to materialise at scale due to poor soil quality and inadequate irrigation infrastructure (Fahim, 1983). As a result, Nubian men were forced to continue their long-standing patterns of leaving the village to find wage labour in urban centres. These economic dynamics left women isolated in an unfamiliar urban landscape. In Old Nubia, the long-term absence of men was mitigated by the tight-knit security of the clan hamlet, where women operated within safe, familiar spaces (Mahgoub, 1990). In the crowded, alienating environment of New Nubia, women no longer felt secure. Additionally, their daily responsibilities multiplied. They were tasked with navigating inadequate housing and managing a household without the traditional support networks of the extended family.

4.4 Language, Heritage and the Politics of Heritage

The physical uprooting from the Nile banks directly undermined the transmission of Nubian Intangible Cultural Heritage (ICH) across generations. Traditional Nubian identity is anchored by two distinct, indigenous non-written languages: Kenzi and Fadicca (Mahgoub, 1990). These languages are mutually

unintelligible; a native Kenzi speaker cannot naturally comprehend a Fadicca speaker, and vice versa. In Old Nubia, these linguistic groups were separated by hundreds of kilometres, allowing each language to maintain its vocabulary, oral and regional variants. By compressing these communities into a compact, 60-kilometre strip, those diverse groups were forced to communicate only in Arabic. Furthermore, the Nubian languages are closely connected to the riverine geography of the region, with complex vocabularies that reflect the Nile's currents and the various regional and seasonal activities. However, the physical displacement of the community from their river environment has left younger generations without the practical references needed to learn and preserve these terms. As a result, there has been a decline in the cross-generational transmission of ancestral traditions (Agha, 2016; Habbob, 2026). This cultural loss reveals a significant irony in the global politics of heritage. During the construction of the Aswan High Dam, UNESCO initiated its renowned International Campaign to Save the Monuments of Nubia, which prioritised the preservation of physical monuments while overlooking the human cost of the community's displacement (Mahgoub, 1990).



Figure 11: The UNESCO Courier 1980-1

5. Discussion: Cultural Resilience, Adaptation, and Survival

Despite the significant social, cultural, economic, and spatial changes in Nubia, the history of New Nubia is not merely a story of passive victimisation. Rather, it illustrates a powerful narrative of cultural resilience and active adaptation. A key component of this resilience was the establishment of Nubian Associations. Initially founded in urban migration centres like Cairo and Alexandria as basic hometown social clubs (Mahgoub, 1990), these associations functioned as socio-political hubs and cultural advocacy networks. They pooled financial resources to support the preservation of local cultural heritage and language. Moreover, the Nubian people actively resisted the uniformity imposed by state-constructed housing prototypes. Over the years, residents modified their concrete units using their own resources, knocking down interior walls, expanding courtyards, and constructing new rooms that echoed the spatial configurations of the traditional *nōg*. Women and local artisans began painting vibrant geometric patterns, protective symbols, and cultural motifs onto the plain concrete facades and entry gates of New Nubia. These spatial modifications ensured that culture remains an active, living practice that can be rewritten in response to new and challenging landscapes.

6. Conclusion

The socio-cultural transformation of Nubia following the construction of the Aswan High Dam offers a profound, cautionary lesson for global development. It demonstrates that mega-infrastructure projects, even when successful in delivering environmental and economic benefits like flood control, energy production, and agricultural growth, can cause serious, irreversible damage to indigenous communities if human costs are ignored. The Nubian experience shows that forced displacement (I'ahjir) cannot be solved by simply providing material shelter. Treating homes as standardised concrete boxes fails to account for the complex ways in which architecture, village geography, and cultural identity are intertwined. Ultimately,

this study highlights that human heritage cannot be separated into material monuments and living communities. The global campaign that spent millions to move the stone temples of Ab Sambal while ignoring the displacement of 100,000 people stands as an enduring critique of top-down development and preservation practices. True development must prioritise the living practices, spatial needs, and human rights of local populations. The survival of Nubian culture today is not a result of state planning, but rather a testament to the enduring resilience, adaptability, and agency of the Nubian people, who continue to reshape their environments and preserve their identity against overwhelming odds.

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