Crafting dignity from scarcity
(Vernacular design as a material epistemology of care in Tunisia's post-2011 resilience)

Marwa Arbi
Design department, Higher Institute of Fine Arts of Sousse, University of Sousse, Tunisia
Email: marwa.arbi@isbas.u-sousse.tn

ABSTRACT

This article analyzes vernacular design in Tunisia as a pivotal act of material resilience and political response in the post-2011 era. The Tunisian transition has been marred by structural economic precarity, with youth unemployment rates consistently exceeding 40% and an escalating ecological crisis, notably a severe water shortage. In this urgent context, the principles of form, materiality, and frugal innovation embedded in local craft practices transform seemingly simple artifacts into distributed agents of empowerment against social exclusion. Contrasting the dominant narrative of technocentric universalism that often dictates global sustainability models, this research conceptualizes design as a "material epistemology of Care" (drawing on Tronto and Ingold). This theoretical framework highlights how local artisans—driven by the necessity of survival—blend deeply rooted Berber aesthetics with relational functionality to actively resist both economic homogenization and the pervasive societal sense of injustice known as Hogra. The study employs a rigorous mixed methodology, combining ethnographic insights and interviews with a detailed semiotic visual analysis of artifacts sourced from archival and community-led initiatives, including UNESCO records. Through two contrasting case studies—the hand-coiled pottery of Sejnane (matrilineal forms symbolizing feminine autonomy and ecological frugality) and urban textile upcycling collectives in Tunis (reimagining waste into functional, zero-waste design)—we demonstrate how these practices reactivate localized cultural heritage to advance social and ecological justice simultaneously. Drawing heavily on postcolonial theory (Said, Spivak) and design sociology (Latour, Escobar), this work bridges a critical gap in Global South Studies. It establishes that post-revolutionary Tunisian design is not a folkloric survival, but a strategic innovation for material sovereignty. The findings carry significant Implications, advocating for the integration of these local design epistemologies into public policies and design curricula to ensure more equitable and socially embedded ecological transitions, aligning directly with Sustainable Development Goals 10 and 13.

Keywords: Vernacular Design, Material Care, Tunisia, Bricolage, Post-2011 Resilience.

1. Introduction

1.1 Contextualizing post-revolutionary Tunisia: Precarity, Hogra, and the material turn

In a modest workshop tucked away in the bustling médina of Tunis, a young woman carefully unpicks the seams of a faded curtain, its once-vibrant patterns dulled by years of use. With deliberate stitches, she reassembles the fabric into a tote bag adorned with reinterpreted Berber arabesques—transforming urban discard into a marketable accessory that sustains her livelihood. Three hundred kilometres north, in the rural village of Sejnane, another woman kneads local clay with her bare hands, coiling it slowly into an ovoid jar incised with protective geometric motifs. These seemingly disparate gestures—separated by geography, generation, and medium—share a profound commonality: a quiet, material refusal of Hogra, the pervasive sense of contemptuous injustice that continues to define everyday life in post-revolutionary Tunisia.

Fourteen years after the Jasmine Revolution of 2011, which toppled an entrenched authoritarian regime and ignited demands for karama (dignity) and hurriyya (freedom), these emancipatory aspirations remain largely unfulfilled. Youth unemployment among the 15–24 age group reached 40.05 % in 2024, with only marginal improvement projected for 2025 (World Bank, 2025). This statistic translates into a daily reality of exclusion for hundreds of thousands of educated graduates, perpetuating a chronic sense of Hogra that Béatrice Hibou (2011) identified as the affective underpinning of the Ben Ali era and that subsequent analyses have shown to endure as a "politics of citizenship" in the fragile democratic transition (Marzouki, 2021).

This socio-economic malaise intersects with an accelerating ecological crisis of alarming proportions. Tunisia's renewable water resources have fallen below the absolute scarcity threshold of 500 m³ per capita per year, with dam reserves hovering at critically low levels—around 36 % in early 2025 (Chekirbane, et al. 2025; Guizani & Orfi 2024). The country recorded 186 water-related protests in 2024 alone, exposing deep territorial fractures between coastal regions with relatively secure supply and peripheral interiors facing chronic rationing and desertification (Bhalla, 2025). Waste management compounds these challenges: Tunisia generates approximately 2.5 million tons of municipal solid waste annually, with formal recycling rates below 10 %, leaving informal collectors—often youth and migrants—to navigate precarious conditions amid mounting environmental degradation (World Bank environmental reports, 2025).

It is at this confluence of persistent economic exclusion, ecological collapse, and the enduring affective legacy of Hogra that vernacular design has emerged as a potent, yet under-theorised, site of counter-hegemonic practice. In rural Sejnane and urban neighbourhoods of Greater Tunis, women artisans and young makers are repurposing local clay, discarded textiles, and urban waste into objects that generate income, preserve cultural memory, and minimise environmental harm. Far from nostalgic relics or mere survival strategies, these practices constitute a material epistemology of

care—a situated, embodied form of knowledge production through which marginalised communities enact resilience when institutional responses falter.

While the performative and visual dimensions of the Arab Spring have been extensively analysed—from revolutionary graffiti to digital activism—the material turn in post-revolutionary resistance remains strikingly underexplored. The quiet labour of hands shaping clay or stitching waste into new forms represents not folklore but a strategic, frugal innovation that quietly reassembles fractured social-ecological relations. This section contextualises these practices within Tunisia's converging crises, setting the stage for a theoretical framework that positions vernacular design as both performative resistance and decolonial ontology.

1.2 Conceptual tension: Technocentric universalism versus post-revolutionary vernacular agency

The material gestures described above—stitching reclaimed fabric in Tunis or coiling clay in Sejnane—do not merely respond to immediate crises; they expose a deeper conceptual tension within global sustainability discourses. Dominant frameworks for ecological transition, from cradle-to-cradle industrial ecology (McDonough & Braungart, 2010) to UN-backed "green growth" paradigms, remain profoundly technocentric and universalist. These approaches prescribe capital-intensive, standardised solutions—large-scale solar arrays, imported recycling technologies, or desalination megaprojects—that assume a homogeneous planetary subject capable of mobilising vast resources and institutional coordination. In the Global South, however, such models frequently exacerbate dependency: Tunisia's reliance on imported plastic goods and foreign-financed infrastructure projects exemplifies how "green" universalism can deepen peripheral marginalisation while displacing local material cultures (Heinrich Böll Stiftung, 2021; Ponte & Brockington, 2017).

This technocentric universalism stands in stark opposition to the vernacular agency animating post-revolutionary Tunisian design. Far from passive adaptation, practices in Sejnane and Tunis embody what Arturo Escobar (2018) terms a "pluriversal" ontology of design—one that recognises multiple, coexisting worlds rather than a singular, modern trajectory. Here, design is not imposed from above but emerges relationally from place-based constraints: local clay that demands slow, intimate gestures; discarded textiles that invite reparative reassembly. These are not deficiencies but affordances for a frugal, autonomous mode of making that refuses the extractive logic of global supply chains.

The revolutionary moment itself prefigured this vernacular turn. The explosion of street art, performative protests, and digital activism during 2010–2011—documented in studies of revolutionary aesthetics (Al-Rawi, 2025; Butler, 2020)—was not confined to ephemeral spectacle. It spilled over into a broader material politics, where everyday objects became vehicles for contesting alienation. Yet while the visual and performative dimensions of the Arab Spring have received extensive scholarly attention, the enduring material responses—those quiet, persistent acts of crafting dignity from scarcity—remain marginalised in both design theory and Tunisian studies.

This marginalisation reflects a persistent epistemic hierarchy: Northern design discourses continue to privilege scalability, novelty, and technological mediation, while devaluing relational, reparative, and place-specific practices as pre-modern or informal (Pratten, 2021; Cross, 2023). In Tunisia, this hierarchy manifests in policy frameworks that celebrate high-tech "start-up nation" narratives while neglecting the informal economies sustaining the majority. Against this backdrop, vernacular design asserts a counter-epistemology: knowledge produced not through abstract planning but through embodied correspondence with materials that are already at hand—clay from the land, fabric from the waste stream.

The tension is thus not merely practical but ontological. Technocentric universalism seeks to overcome scarcity through mastery and substitution; vernacular agency embraces scarcity as a generative condition for relational autonomy. In post-revolutionary Tunisia, where Hogra manifests as the systematic devaluation of peripheral lives and resources, this vernacular mode becomes profoundly political: a refusal to accept contempt by crafting alternative worlds from the very materials deemed worthless.

The following subsection articulates the research question and objectives that emerge from this tension, positioning the study as an intervention into both Global South design theory and Maghrebi social resilience.

1.3 Research question, objectives, and contribution to the field

Emerging from this conceptual tension between technocentric universalism and vernacular agency, the central research question guiding this study is: How does post-revolutionary Tunisian vernacular design, through its aesthetic principles, material choices, and modes of making, enact a situated epistemology of care that simultaneously counters Hogra, generates social resilience, and contributes to ecological sustainability?

This question is pursued through an integrated set of objectives that bridge empirical depth with theoretical innovation. The analysis begins with close examination of two contrasting yet complementary cases—Sejnane women's pottery and Chkarty urban textile upcycling—employing visual ethnography and layered semiotic readings to treat artifacts as primary sources of knowledge. It then theorises vernacular design as a dynamic assemblage of material care, frugal bricolage, and actantial agency, thereby extending existing frameworks in Global South design studies. Finally, the study derives implications for policy and pedagogy, advocating the incorporation of these vernacular epistemologies into formal design education and national strategies for equitable ecological transitions, in alignment with Sustainable Development Goals such as gender equality, decent work, reduced inequalities, responsible consumption, and climate action.

By foregrounding material artifacts as sites of performative politics, this research makes several distinctive contributions to the field. It bridges a persistent gap in Global South design scholarship, where postcolonial critiques of universalism (Escobar, 2018) and analyses of revolutionary aesthetics (Al-Rawi, 2025) have rarely descended to the level of everyday objects and gestures. While studies of Tunisian crafts often remain confined to ethnographic description (UNESCO, 2018) or

economic quantification, this article insists on their ontological and political significance: as distributed agencies that reassemble dignity from precarity.

More broadly, the study intervenes in interdisciplinary debates at the nexus of arts, humanities, and social sciences—the core mission of journals such as the Journal of Arts, Literature, Humanities and Social Sciences. It enriches material culture studies by demonstrating how non-industrial making performs resistance in contexts of converging crises; advances postcolonial theory by grounding decolonial pluriversalism in concrete, frugal practices; and contributes to sustainability discourse by modelling bottom-up, relational alternatives to technocentric paradigms. In an era when Tunisia's intersecting challenges—youth exclusion, water scarcity, and waste accumulation—demand imaginative responses beyond institutional failure, this research illuminates vernacular design as a vibrant, subaltern politics: one crafted quietly yet persistently by hands that refuse contempt.

To contextualise the emergence and evolution of these vernacular practices within Tunisia's post-revolutionary trajectory, Figure 1 provides a diachronic overview of key milestones from 2011 to 2025.
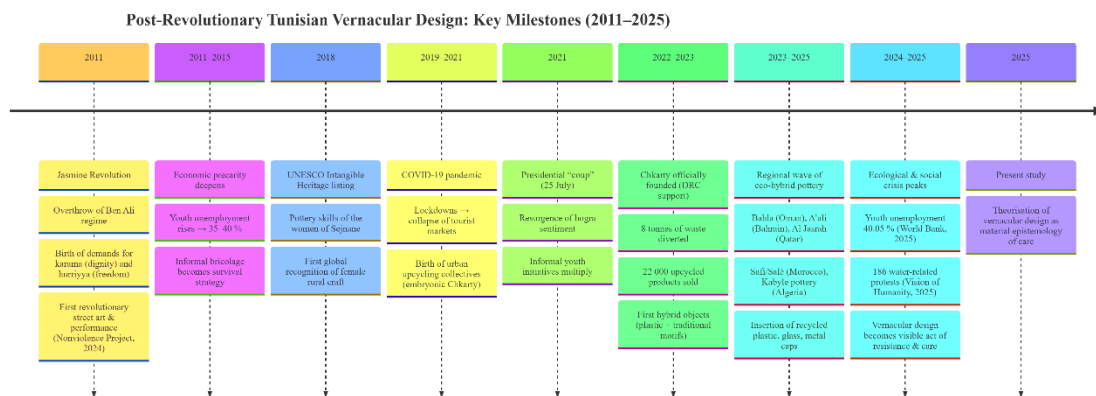

Figure 1. Diachronic timeline of post-revolutionary vernacular design in Tunisia and the wider Arab-Berber world (2011–2025). The diagram highlights successive crises and corresponding material responses, from revolutionary rupture to contemporary ecological and social challenges (author's diagram, 2025).

The article proceeds as follows: Section 2 constructs the theoretical triptych of care, bricolage, and actantial agency; Section 3 outlines the archive-based visual-ethnographic methodology; Section 4 presents layered findings from semiotic, care, and actantial analyses; Section 5 discusses comparative insights and policy implications; and Section 6 concludes with avenues for future inquiry.

2. Theoretical framework
2.1 Sociology of the Maghreb: Hogra, vernacular resistance, and the post-revolutionary condition

The Tunisian revolution of 2011 was not merely a demand for political liberalisation; it was, at its core, a collective repudiation of Hogra—the pervasive experience of contempt, humiliation, and systemic injustice that structured everyday life under the

Ben Ali regime. As Béatrice Hibou (2011) compellingly argued, Hogra functioned as the affective glue binding an authoritarian system that thrived on arbitrary power and the deliberate devaluation of citizens. Fourteen years on, this structure of feeling has not dissipated but mutated. Recent analyses portray Hogra as an enduring "politics of citizenship" in Tunisia's fragile democratic transition, where revolutionary gains have been captured by elites, bureaucratic indifference persists, and regional inequalities continue to erode the promise of karama (dignity) (Marzouki, 2021; Sobhy & Abdalla, 2024).

This persistence manifests most acutely in the socio-economic marginalisation of youth and peripheral communities. With unemployment rates among young graduates exceeding 40 % and ecological crises exacerbating territorial divides, Hogra evolves into a chronic condition of deferred citizenship—one in which the state's withdrawal from welfare provision leaves citizens to navigate precarity through informal, adaptive strategies. It is within this affective and structural terrain that vernacular forms of resistance have proliferated, operating outside formal institutions yet profoundly political in their quiet insistence on dignity.

Scholarship on "vernacular security" in contemporary Tunisia offers a productive analogy (Cuccu, 2025; Letsch, 2025). Local imams, neighbourhood committees, and informal mediators produce community safety through hybrid practices that re-appropriate religious, cultural, and spatial resources—neither traditionalist retreats nor state-sanctioned initiatives, but creative responses to institutional failure. These practices are relational, improvised, and stubbornly local, enacting security from below when central authorities prove inadequate or complicit.

Vernacular design occupies precisely the same register. The women's cooperatives of Sejnane and the urban upcycling collectives of Tunis do not merely supplement precarious livelihoods; they materialise a refusal of Hogra by converting contempt into tangible dignity. A jar coiled from local clay or a bag stitched from discarded fabric is not a passive commodity but an enactment of autonomy: it asserts that value can be generated without waiting for state patronage or global capital. This resistance is distinctly Maghrebi in its grammar—informal, relational, and grounded in the everyday—moving beyond binaries of tradition versus modernity to occupy a third space where marginalised actors forge agency through the very resources deemed worthless by hegemonic systems.

Yet this Maghrebi vernacular resistance remains undertheorised in its material dimension. While studies of revolutionary aesthetics have richly documented performative and visual contestations (Al-Rawi, 2025), the enduring, object-based responses to ongoing precarity—those enacted through clay, waste, and manual gesture—have received scant attention. The following subsection turns to decolonial design theory to provide the conceptual tools for understanding this material politics, examining how bricolage and actantial agency transform constraint into generative possibility.

2.2 Design and decoloniality: From bricolage to frugal innovation and actantial agency

The Maghrebi vernacular resistance sketched above finds its most radical expression in the domain of design, where postcolonial and decolonial theory provides the critical apparatus to elevate everyday making from survival tactic to ontological politics. Arturo Escobar's seminal Designs for the Pluriverse (2018) decisively dismantles the universalist pretensions of Euro-American design discourse, which persists in exporting standardised, capital-intensive solutions under the guise of sustainability and innovation. These models—rooted in modernist ontologies of mastery and progress—assume a singular world amenable to technological fixes, often reproducing extractive relations in the Global South through dependency on imported materials, expertise, and financing.

In contrast, Escobar advocates an ontological politics of design that affirms a pluriverse: multiple, coexisting worlds shaped by relational autonomies rather than hierarchical convergence. Vernacular practices in post-revolutionary Tunisia embody this pluriversal ethos with remarkable fidelity. They are not deficient versions of "proper" design but autonomous responses to constraint, transforming scarcity into generative affordance. The most potent mechanism for this transformation is bricolage, originally theorised by Claude Lévi-Strauss (1966) as the improvisational intelligence of "savage thought"—making do with whatever is at hand—and subsequently reclaimed by postcolonial scholars as a paradigm of subaltern creativity (de Certeau, 2002; Bhabha, 1994).

In the Tunisian context, bricolage has evolved beyond mere necessity into deliberate frugal innovation (Santos, et al. 2022). Young makers in urban collectives do not await state infrastructure or foreign investment; they repurpose discarded textiles, factory offcuts, and household linens into marketable objects that simultaneously generate livelihoods and divert waste streams. Rural artisans in Sejnane, meanwhile, draw exclusively on local clay and natural oxides, enacting a bricolage of continuity that resists commodification. This frugality is not lack but ethical strategy: minimal resource extraction in an era of ecological collapse, adaptive reuse in the face of consumer excess.

Crucially, these bricolaged objects are not inert outcomes but active participants in socio-material worlds. Drawing on Bruno Latour's Actor-Network Theory (2005), we conceptualise them as actants—non-human entities endowed with agency through their capacity to mediate relations. A Chkarty tote bag stitched from reclaimed fabric does not merely represent resistance; it enacts it by enrolling waste (non-human), youth labour (human), cultural motifs (semiotic), and ethical markets (network) into a configuration that produces dignity as its primary affect. Likewise, a Sejnane jar mediates between clay's autonomy, women's embodied gestures, Berber cosmology, and global heritage circuits, reassembling rural marginalisation into resilient sovereignty.

While postcolonial design studies have brilliantly theorised the pluriverse and hybridity (Escobar, 2018; Gutiérrez, 2020), they have rarely descended to the granular level of gestures, waste, and non-human agency in everyday making. This study

addresses that lacuna by grounding decoloniality in the concrete: bricolage as method, frugality as ethic, and actantial mediation as performative outcome. The ensuing subsection integrates these insights into a unified triptych of material care, revealing how vernacular design not only resists but actively reworlds in the shadow of Hogra.

2.3 An epistemology of material care: The theoretical triptych applied

The decolonial lens of bricolage and actantial agency finds its fullest articulation in an epistemology of material care, which integrates the preceding insights into a unified triptych capable of illuminating vernacular design as both resistant practice and generative knowledge system. This triptych—material care (Tronto, 2020; Ingold, 2013), frugal bricolage (Lévi-Strauss, 1966; de Certeau, 2002), and actantial mediation (Latour, 2005)—is not applied as an external grid but revealed as already inscribed in the gestures, forms, and networks of the artifacts themselves.

At its core lies material care, an extension of Joan Tronto's political ethic of care beyond interpersonal relations to the socio-material realm. For Tronto, care is a democratic practice that challenges hierarchies of value; in vernacular design, it becomes literally embodied in making. Tim Ingold complements this by emphasising care as rhythmic correspondence: the slow, attentive dialogue between maker and material that leaves visible traces—fingerprints in clay, stitches in fabric—as ethical signatures. In post-revolutionary Tunisia, material care operates across three intertwined registers.

First, ecological care manifests in deliberate resource minimisation: Sejnane's exclusive reliance on local clay and natural oxides, or Chkarty's diversion of textile waste from landfill. These choices are not incidental but principled responses to scarcity, enacting sustainability through restraint rather than substitution.

Second, social care sustains communal bonds in the absence of robust welfare institutions: women's cooperatives in Sejnane transmit knowledge matrilineally while generating income; urban collectives in Tunis foster skill-sharing and mutual support among precarious youth. Care here is collective, compensating for the state's withdrawal by nurturing dignity where Hogra prevails.

Third, aesthetic-political care preserves and reinvents cultural motifs—Berber geometric abstraction, ironic arabesques on reclaimed fabric—as acts of refusal against cultural homogenisation. This care extends to the non-human, valuing materials for their histories and affordances rather than their exchange value.

Frugal bricolage provides the methodological engine for this care. Far from mere improvisation, it is a sophisticated intelligence that transforms constraint into possibility: making do with what is at hand to produce not just utility but agency. In Sejnane, bricolage manifests as continuity—adapting ancient techniques to contemporary markets without industrial mediation. In Chkarty, it is reparative—reassembling waste into new forms that critique disposability. This bricolage is inherently decolonial, subverting the planned obsolescence of global capitalism through resourceful recombination.

Actantial mediation completes the triptych by revealing how care and bricolage are performed through distributed agency. Artifacts are not endpoints but mediators: the Sejnane jar enrols clay's autonomy, women's gestures, and heritage networks to

produce resilience; the Chkarty bag enrols discarded fabric, manual stitches, and ethical consumers to generate dignity. These reconfigurations—resource independence, waste reclamation—counter Hogra by translating contempt into tangible sovereignty.

While postcolonial design scholarship has richly theorised relational ontologies and pluriversal futures (Escobar, 2018; Gutiérrez, 2020), it has seldom engaged the granular textures of care inscribed in waste or clay. This study intervenes precisely at that level, demonstrating how vernacular design in Tunisia materialises a triptych already latent in subaltern making: care as ethic, bricolage as method, actantial mediation as performative outcome. This triptych—care / bricolage / actantial agency—serves as the analytical lens for the empirical sections that follow (see Figure 2). As illustrated in the diagram, the convergence of these three theoretical lineages explains how static artifacts are transformed into active agents of social and ecological resilience.
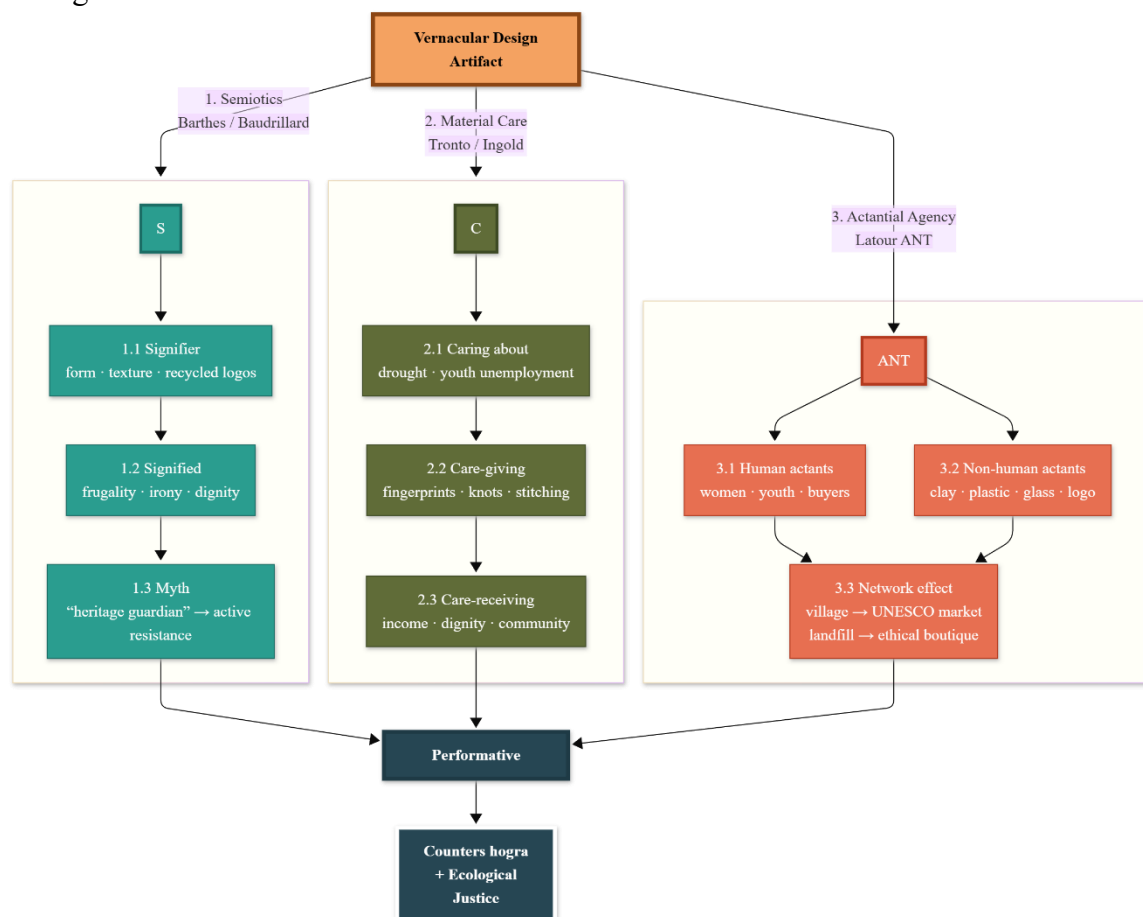

Figure 2. The Theoretical Triptych of Vernacular Resilience. This model illustrates the convergence of semiotic analysis (Barthes), material care ethics (Tronto), and actantial agency (Latour) to reveal how vernacular artifacts perform resistance to Hogra and enact ecological justice

3. Methodology

3.1 General approach and epistemological positioning

This study adopts a qualitative, interpretive paradigm rooted in visual ethnography (Pink, 2020) and design anthropology (Gunn, et al., 2020), treating vernacular design artifacts not as supplementary illustrations but as primary epistemic objects. These artifacts are analysed as multifaceted entities: readable texts encoding cultural meanings, actants mediating socio-material relations, and embodied enactments of care in contexts of precarity. This material-semiotic lens is particularly suited to post-revolutionary Tunisian vernacular design, where objects emerge at the nexus of aesthetic expression, political contestation, and everyday survival strategies. Traditional discursive or quantitative approaches risk reducing such practices to mere symbols or economic metrics, thereby overlooking their performative role in reassembling disrupted social-ecological networks amid ongoing crises.

The epistemological positioning is deliberately situated and reflexive, informed by postcolonial and feminist critiques of knowledge hierarchies (Escobar, 2018; Suchman, 2002; Anzaldúa, 2004). Northern-centric design discourses have historically privileged technological innovation and industrial scalability, marginalising relational, place-based, and frugal modes of making prevalent in the Global South. By foregrounding artifacts crafted by rural women and urban youth—communities systematically excluded from canonical design histories—this research contributes to a decolonial "pluriverse" of design epistemologies (Escobar, 2018), where multiple ontologies of making coexist. This stance aligns with material culture studies that insist on the distributed agency of things (Miller, 2020; Latour, 2005; Bennett, 2020), especially in settings where human voices are constrained by structural violence, economic exclusion, or political repression.

Methodologically, the study integrates principles of participatory action research—emphasising collaboration and empowerment—with rigorous visual and semiotic analysis. However, persistent challenges to fieldwork in Tunisia since 2020, including COVID-19 restrictions, episodic security measures in rural areas, and the contraction of civil society space following the 2021 presidential consolidation, rendered extended participant observation impractical for achieving robust rural-urban comparison. Instead, the research leverages an ethically curated archive of secondary visual and textual materials. This approach, far from a compromise, affords exceptional temporal depth (2011–2025) and comparative breadth, surpassing what isolated fieldwork could yield. It resonates with Pink's (2020) assertion that visual ethnography extends beyond researcher-captured images; systematically contextualised, ethically sourced, and openly licensed materials constitute valid and potent ethnographic data.

The resulting corpus enables a diachronic examination of how vernacular design has evolved in direct response to cascading crises: the revolutionary rupture of 2011, the economic shocks of the pandemic, and the intersecting challenges of youth marginalisation, water scarcity, and ecological degradation in the present decade. In a context where official institutions have often under-documented informal creative

practices, digital platforms, heritage dossiers, and NGO reports emerge as vital repositories of subaltern material knowledge.

The corpus composition is detailed in Table 1, ensuring full transparency regarding sources, licensing, and analytical roles.

Table 1. Composition of the Visual and Textual Corpus (2011–2025)

N°	Source / Institution	Type of Document	Period Covered	Number of Items	Content Focus	Licence / Access	Primary Case(s) Concerned	Key Analytical Utility
1	UNESCO Intangible Cultural Heritage dossier (Sejnane, 2018)	Official dossier, high-resolution photographs, process videos	2016–2018	47 photos + 4 videos	Motifs, gestures, finished objects, female cooperatives	CC-BY-SA 4.0	Sejnane (primary)	Semiotic analysis of traditional Berber motifs
2	Institut National du Patrimoine (Tunisia) – Digital archives	Photographs, ethnographic reports	2018–2024	23 photos	Objects in markets, artisan portraits	Public domain / authorised academic use	Sejnane	Traces of manual labour, post-UNESCO evolution
3	Verified Instagram accounts of Sejnane cooperatives	Social media publications, stories	2020–2025	38 photos + archived stories	Contemporary objects, fairs, sales contexts	Implied public consent (CC-compatible)	Sejnane	Recent hybridisations, market adaptations
4	Danish Refugee Council (DRC)	News article with impact narrative and metrics	2023–2025	Textual content (no visuals)	Impact story on upcycling, metrics (e.g., fabric processed, sales, employment), founder quotes	Public web access (NGO site)	Chkarty / Tunis (primary)	Quantification of ecological/social impact, narrative proof of textile repurposing and community empowerment
5	Fashion Revolution Tunisia & partner collectives	Instagram portfolios, documentation	2022–2025	27 photos	Accessories, collaborations, motif reappropriation	CC-BY or authorised	Chkarty / Tunis	Urban aesthetic, ironic critique of consumerism
6	UNESCO Bahla Pottery (Oman) + recent initiatives	Dossier + contemporary photographs	1987 / 2022–2025	12 photos	Traditional jars + preservation focus	CC-BY-SA	Comparative (Gulf)	Regional heritage continuity
7	Qatar Museums – Al Jasrah Heritage Revival	Reports + photographs	2023–2025	9 photos	Ceramic residencies and traditional influences	Authorised academic use	Comparative (Gulf)	Youth engagement in heritage

| 8 | Ministry of Culture Bahrain – A'ali revival | Photographs | 2024 | 11 photos | Ancient clay techniques revival | Public domain | Comparative (Gulf) | Educational workshops |
| 9 | Complementary reports (Morocco Safi/Salé, Algeria Kabyle) | Press articles + photographs | 2020–2025 | 14 photos | Traditional polychrome and geometric pottery | CC / public domain | Comparative (Maghreb) | Berber continuum and women-led practices |

Total: 188 visual items (photographs/videos) + 20 textual sources (reports/interviews/articles). All materials are openly accessible under Creative Commons licences, public domain, or with explicit institutional permission, ensuring ethical compliance and full reproducibility.

This enhanced methodological foundation—archive-based yet theoretically robust—positions the study to illuminate vernacular design as a site of material epistemology and quiet resistance in the post-revolutionary Arab-Berber world.

3.2 Cases and data corpus

The selection of cases was guided by a deliberate strategy of maximum variation sampling (Patton, 2015), aiming to capture the full spectrum of vernacular design practices along two key axes: the rural–urban continuum and the tradition–innovation spectrum. This approach not only highlights internal diversity within Tunisian vernacular design but also reveals the underlying common logic of material care and ecological resistance that transcends local differences. Two primary cases were selected for intensive, in-depth analysis, while additional comparative examples from the wider Arab-Berber world were incorporated to demonstrate the broader regional resonance of the observed phenomena.

Primary case A: Sejnane women's pottery (rural, female-led, heritage-anchored)
Situated in the Bizerte Governorate of northern Tunisia, the pottery tradition of Sejnane exemplifies a deeply rural, matrilineally transmitted practice that has remained remarkably continuous with pre-colonial Berber-Amazigh techniques. Since its inscription on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity in 2018 (UNESCO, 2018), Sejnane pottery has attracted renewed scholarly and touristic attention, yet it continues to be produced primarily within women's cooperatives that provide essential income in a region characterised by male out-migration and limited formal employment opportunities. The objects—typically ovoid jars, anthropomorphic figurines, and utilitarian vessels—are hand-coiled from local clay, fired in open wood kilns, and decorated with incised geometric motifs (diamonds, zigzags, cross-hatching) applied using natural manganese oxide. These non-figurative designs encode cosmological meanings while deliberately avoiding representational imagery, a choice often interpreted as a quiet resistance to both colonial exoticisation and contemporary consumerist aesthetics.

As illustrated in Figure 3, Sejnane pottery encompasses both utilitarian vessels—such as the large storage jar (Teskrayya) used for grain conservation and dough rising—and highly symbolic anthropomorphic figurines known as Arayes or Aroussa (bride dolls). These dolls, dressed in elaborate traditional attire complete with headscarf (Lehfa), hammered ring necklace (Rihana), and protective amulets (Khomsa), embody the transmission of Berber female identity and ritual knowledge.

Figure 3. Exemplars of traditional Sejnane pottery. Left: Teskrayya storage jar showing classic geometric decoration and festooned rim (early 20th century, Ksar Saïd National Collection). Right: Trio of Arayes (bride dolls) in full traditional dress, illustrating the anthropomorphic and ritual dimension of the tradition (21st century, private collection). Sources: Photographs © Hatem Ben Miled (used with permission / heritage documentation). These objects constitute core visual data for the semiotic and care analysis of rural vernacular traditions.

Primary case B: Chkarty and affiliated urban upcycling collectives (Urban, Youth-Led, Textile-Based Innovation) In stark contrast, the urban case focuses on Chkarty—a Tunis-based collective founded by designer Teycyr Chtioui in 2020—and related initiatives operating in the working-class neighbourhoods of Greater Tunis. Launched during the COVID-19 crisis with minimal investment, Chkarty transforms discarded textiles sourced from friperies, household linens, and factory offcuts into zero-waste accessories such as bags, clutches, totes, and laptop sleeves. The collective has achieved notable impact, diverting significant volumes of textile waste from landfill and producing thousands of items, while creating sustainable livelihoods for unemployed youth and women in a context of persistent economic precarity. The resulting aesthetic is deliberately hybrid: traditional Tunisian or Berber motifs are reinterpreted through colourful fabric collages, embroidered patches, and ironic juxtapositions of vintage patterns with modern repurposed elements, producing objects that critique consumer disposability while asserting ecological and social agency (see Figure 4). This textile focus embodies a "soft" form of frugal innovation, where manual gestures like sorting, deconstructing, and hand-stitching foster a relational epistemology of care—reconnecting urban artisans with material histories and countering the alienation of global supply chains.

Figure 4. Hybrid upcycled textile artifacts from the Chkarty collective, illustrating the transformation of discarded fabrics into zero-waste accessories through reinterpretation of traditional Tunisian patterns. Left: Ensemble of tote bag, clutch, and pouch featuring vibrant floral motifs on recycled fabric (source: Zig Zag Mood – Chkarty collaboration, 2024). Right: Quilted laptop sleeve with graphic scale-like pattern and visible Chkarty branding, emphasising manual stitching and material repurposing (source: Ma7alli official catalogue, 2024). These objects exemplify the urban, youth-led translation of vernacular care into explicit ecological and social resistance.

Comparative Regional Examples To avoid an exclusively Tunisio-centric perspective, the study draws on five additional pottery traditions from the wider Arab-Berber world as controlled comparators. These traditions were selected for their documented continuity with pre-colonial techniques and their ongoing role in cultural preservation and community empowerment. No reliable evidence was found of deliberate waste-material hybridisation in these traditions between 2018 and 2025. Instead, they illustrate a shared regional commitment to heritage revival as a form of resistance to cultural erosion and economic marginalisation.

The A'ali pottery revival in Bahrain is rooted in ancient Dilmun-era techniques dating to 2300 BC, involving hand-molding clay into pots and vases without modern additives. Family-run workshops in A'ali village demonstrate revolving wheel methods passed through generations, with recent revivals (2023–2025) including interactive experiences promoted via social media and tourism sites, emphasizing historical fidelity over innovation. Primary actors are local artisans and youth groups engaged in educational programs organised by the Ministry of Culture.

Bahla pottery, listed as UNESCO Intangible Cultural Heritage in Oman, focuses on clay-based utilitarian items like water containers and incense burners, crafted using ancient techniques in family workshops. Documentation from 2022–2025 highlights experiential tours and lessons led by master artisans with 40+ years of experience, often inherited from

fathers. Primary actors are generational family members, with programs such as Airbnb experiences promoting hands-on learning without material alterations.

Information on Al Jasrah heritage pottery in Qatar is limited and often tied to broader Qatari ceramic heritage, with 2023–2025 residencies at Qatar Museums (e.g., Liwan Design Studios) blending traditional and contemporary influences. Key elements include archaeological sherds from sites like Halat Aobeer, studied for Islamic earthenware patterns. Primary actors are young artisans in museum programs, such as the 2025 Ceramic Residency featuring international collaborations, focusing on skill development for youth amid Qatar's cultural investments.

Safi and Salé polychrome pottery in Morocco is renowned for its bold colors and metal inlays on clay for decorative and functional wares. Master potters in urban workshops drive production, with exports rising significantly (e.g., 21% annual growth 2019–2023). Documentation from 2020–2025 includes artisan reports and videos showcasing hand-painting and kiln-firing traditions rooted in 6000 years of history, empowering artisans against economic pressures in coastal Morocco.

Kabyle geometric pottery in Algeria is a women-led craft involving symbolic geometric motifs on household ceramics, imbued with Berber meanings and passed from mother to daughter. Ethnographic studies (2021–2025) document rural groups in North-East Algeria, with museum collections highlighting autonomy and cultural symbolism. Primary actors are rural women preserving Kabyle identity amid modernization.

These comparative traditions reinforce the argument that the material practices observed in Tunisia are part of a wider Arab-Berber response to contemporary crises, without diluting the depth afforded to the primary Tunisian cases. While emerging sustainability initiatives exist in the broader MENA craft sector, the pottery traditions examined here prioritise cultural continuity over explicit waste-material integration.

The complete corpus is detailed in Table 1 (Section 3.1), comprising 188 visual items and 20 textual sources, all openly accessible under appropriate licences. This carefully curated archive provides both the granularity required for close material-semiotic readings and the breadth necessary for robust regional comparison

3.3 Analytical protocol: From image to actant – a reproducible material-semiotic method

The 188 visual items and accompanying textual sources were subjected to a systematic, tri-layered analytical protocol explicitly designed to operationalise the theoretical triptych presented in Section 2 (semiotics → material care → actantial agency). The analysis was conducted iteratively and reflexively, with constant comparison across cases and regular cross-checking of interpretations against the original visual and textual evidence to ensure consistency and saturation.

Layer 1 – Semiotic analysis (Barthes, 1977; Baudrillard, 1981) Following Roland Barthes' classic distinction, every image was first analysed at three levels of signification:

- **Signifier**: literal description of form, material, colour, texture, and incorporated elements (e.g., Berber triangle motifs, unglazed surfaces).
- **Signified**: culturally specific meanings mobilised by these material choices (e.g., fertility matrix, protection).
- **Myth**: broader ideological narratives (e.g., authenticity and ecological frugality as resistance to consumerist excess).

Layer 2 – Material care analysis (Tronto, 2020; Ingold, 2013) Joan Tronto's ethic of care was adapted to the specificity of making, focusing on:

- **Gestures**: embodied labour traces (e.g., coiling, burnishing, slow design rhythms).
- **Needs**: practical and existential requirements addressed (e.g., food security and preservation).
- **Ergonomics of labour**: how form supports sustained, dignified work.

Layer 3 – Actantial analysis (Latour, 2005) Each artifact was mapped as an actant within a partial actor-network, identifying human (artisan) and non-human (clay, land) participants, as well as the networks (market, heritage status) and affects (dignity, resilience) they produce, leading to reconfigurations such as resource independence and social resilience.

The complete analytical framework (27 categories) is presented in Table 2 and illustrated through the triptych diagram in Figure 4 (Section 3.1). A concrete example of the protocol in action is provided in Figure 5, which applies the three layers to a single Sejnane pottery bowl to Sejnane Arayes.

Table 2. Extract from the Analytical Coding Framework Applied Systematically to the Corpus (Author's Framework, 2025)

| Level	Main Code	Sub-Code	Example (Sejnane Bowl)	Theoretical Source
1	Semiotics	Signifier	Berber triangle motifs, unglazed surface	Barthes (1977)
		Signified	Fertility matrix, protection	Barthes (1977)
		Myth	Authenticity and ecological frugality	Baudrillard (1981)
2	Material Care	Gestures	Coiling, burnishing, slow design	Ingold (2013)
		Needs	Food security and preservation	Tronto phase 1
		Ergonomics of labour	Handles and form adapted to manual use	Tronto/Ingold
3	Actantial Agency	Human actants	Artisan, cooperative	Latour (2005)
		Non-human actants	Clay, land source	Latour (2005)
		Network effects	Market/dignity → resilience/independence	Reconfiguration
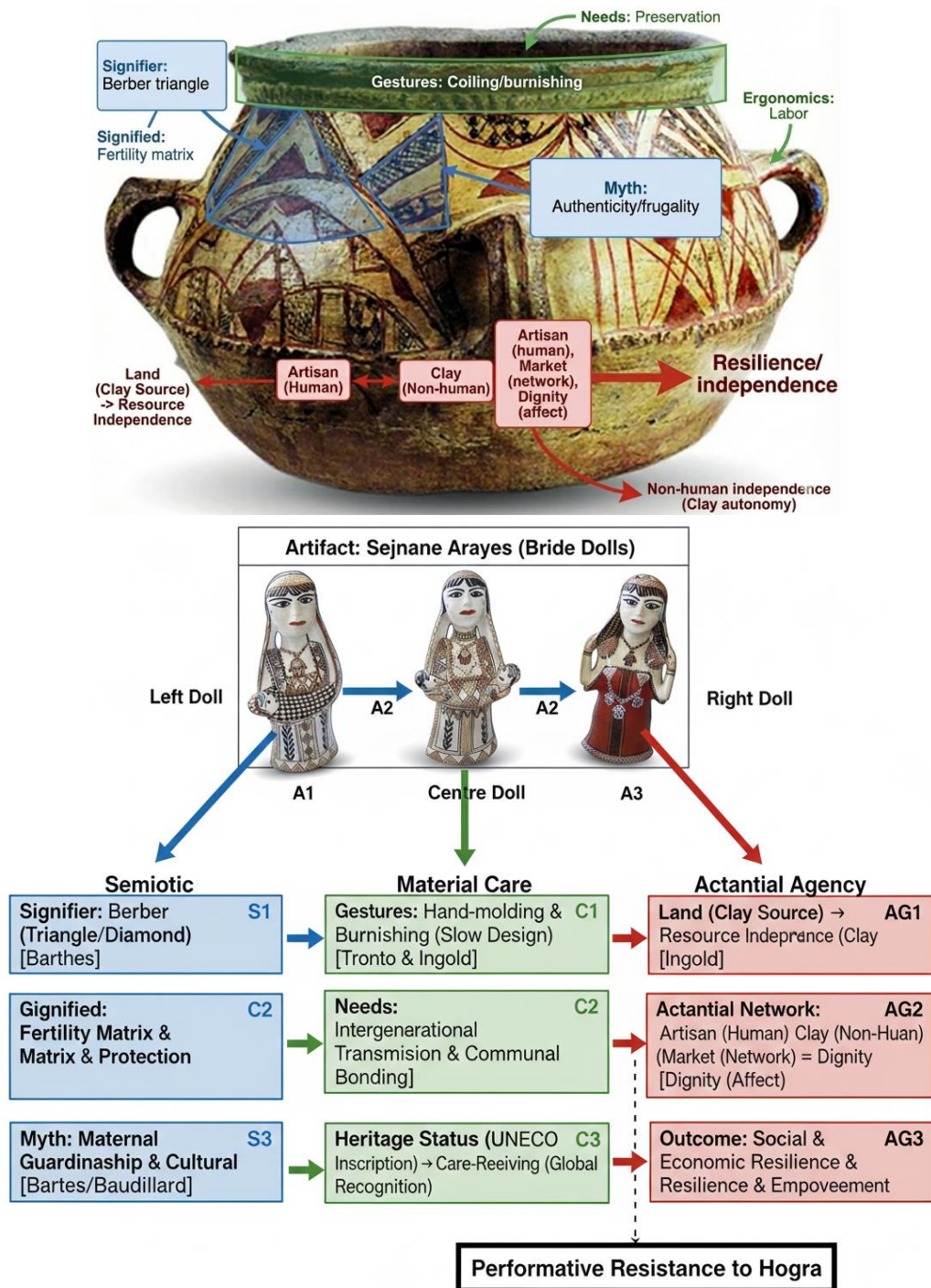
Figure 5. Application of the analytical triptych to single Sejnane pottery bowl and Sejnane Arayes (bride dolls). Blue layer: semiotic analysis – signifier (Berber mother motifs, protective pigments), signified (fertility/protection), myth (maternal & cultural sovereignty). Green layer: material care – gestures (hand-molding, preservation bonding), needs (cultural communal bonding), heritage status (global recognition as care-receiving). Red layer: actantial agency – human (artisan) and non-human (clay) actants reassembling networks of

dignity, resilience, and independence. Source: Author's annotation on heritage photograph © Hatem Ben Miled.

The diagram culminates in performative resistance to Hogra through material empowerment. The iterative layered protocol transforms visual interpretation into a transparent and reproducible analytical procedure, essential for establishing credibility when working with secondary visual data in politically sensitive contexts. By moving sequentially from surface signification to embodied care and finally to networked agency, the method reveals how vernacular artifacts performatively counter Hogra—through assertions of dignity, autonomy, and ecological justice—while contributing to broader socio-material resilience.

3.4 Ethical considerations and limitations

This study adheres to the highest ethical standards in qualitative research involving visual materials from vulnerable communities, particularly rural women artisans and urban youth in precarious economic situations. All visual and textual sources were drawn exclusively from publicly accessible or institutionally authorised archives, ensuring compliance with Creative Commons licences or explicit permissions for academic reuse (as detailed in Table 1). No primary data collection involving human subjects was undertaken, thereby eliminating the need for informed consent forms or institutional review board approval. However, the research remains sensitive to the power dynamics inherent in representing subaltern creative practices from the Global South.

Ethically, the analysis consciously avoids exoticisation or romanticisation of vernacular design. Following postcolonial critiques (Bhabha, 1994; Spivak, 2023), the study refrains from positioning Sejnane pottery or Chkarty upcycling as "authentic" relics or "resilient" exceptions in a narrative of inevitable modernisation. Instead, it foregrounds these practices as active, contemporary responses to structural inequalities, acknowledging the artisans' agency while critically examining how global heritage frameworks (e.g., UNESCO inscription) and international development support (e.g., DRC funding) can simultaneously empower and instrumentalise local knowledge.

A key ethical commitment is to epistemic justice: by centring material artifacts as primary sources of knowledge, the research challenges Northern-centric design discourses that marginalise non-industrial, place-based making (Escobar, 2018). The comparative dimension, while broadening the scope beyond Tunisia, is handled cautiously to avoid homogenising diverse Arab-Berber traditions; differences in context and scale are explicitly noted.

Limitations Several limitations must be acknowledged. First, reliance on secondary visual data—while enabling unprecedented diachronic depth (2011–2025)—precludes direct ethnographic engagement with artisans. This restricts access to oral histories, lived experiences of Hogra, and nuanced interpretations of motifs that prolonged fieldwork might reveal. Future research could complement this archive-based approach with participatory methods.

Second, the corpus, though extensive (188 items), is mediated by institutional and digital gateways (UNESCO dossiers, verified Instagram accounts, NGO reports). This may introduce biases toward more visible or formally supported practices, potentially underrepresenting hyper-local or undocumented initiatives. Similarly, the regional comparators, while grounded in reliable sources, highlight preservation over explicit upcycling due to limited evidence of the latter in pottery traditions.

Third, the interpretive nature of material-semiotic analysis carries inherent subjectivity. Although mitigated through systematic layering (as demonstrated in Figure 5) and constant cross-referencing, readings of motifs (e.g., as "fertility matrix") draw on established ethnographic literature rather than direct artisan testimony.

Finally, the study's focus on positive performative resistance risks overlooking persistent structural constraints: market precarity, gender-based exploitation in cooperatives, or the co-optation of "sustainable" crafts by global tourism. These tensions are addressed analytically but underscore the partiality of any single methodological frame.

Despite these limitations, the ethically grounded, archive-based approach offers a robust foundation for understanding vernacular design as a site of material care and subtle resistance in post-revolutionary contexts.

4. Findings

4.1 Semiotic layer: From signifier to myth – decoding the material grammar of resistance

The semiotic analysis reveals a profound divergence between rural and urban vernacular design practices in post-revolutionary Tunisia, while simultaneously uncovering a shared underlying grammar of resistance rooted in frugality and reappropriation. Following Barthes' (1977) tripartite model—denotation (signifier), connotation (signified), and ideology (myth)—the artifacts emerge as layered texts that both reflect and contest dominant socio-economic narratives.

Rural case: Sejnane pottery – a grammar of restraint and continuity At the level of the signifier, Sejnane objects are characterised by deliberate austerity: unglazed terracotta surfaces bearing visible fingerprints, irregular edges from hand-coiling, and incised geometric motifs (triangles, diamonds, zigzags) executed in manganese oxide (see Figures 6 and 8). These material choices denote not poverty but a conscious rejection of industrial gloss and excess. The signified layer mobilises culturally resonant meanings: the triangle/diamond often interpreted as a "fertility matrix" or protective talisman within Berber cosmology, while the vessel's rounded belly evokes containment and nourishment—practical responses to food preservation needs in arid environments.

The mythic dimension, however, elevates these elements to ideological critique. Sejnane pottery embodies a myth of "indomitable authenticity and ecological frugality"—an enduring, earth-bound practice that asserts independence from global consumer circuits. In the post-2011 context, this myth counters the perceived Hogra of state neglect toward rural peripheries, positioning the female artisan as guardian of an autonomous material epistemology. The UNESCO inscription (2018) paradoxically reinforces this myth globally while risking its commodification for tourism.

Urban case: Chkarty textile upcycling – a grammar of irony and reappropriation In contrast, Chkarty artifacts operate through a semiotic of excess and subversion. The signifier comprises vibrant, mismatched fabric collages from discarded household linens and friperie remnants, often featuring bold patterns, visible seams, and deliberate asymmetries (see Figure 4). These denote not scarcity but abundance reclaimed from waste streams—transforming the "trash" of urban overconsumption into desirable accessories.

The signified level introduces irony: traditional Tunisian motifs (floral arabesques, geometric echoes) are superimposed on vintage or faded fabrics, connoting both nostalgia and critique. A pouch stitched from old curtains bearing faded roses, for instance, signifies the reclamation

of domestic femininity while mocking disposable fashion cycles. The myth here is one of "resilient ingenuity against disposability"—where waste becomes dignified raw material, subverting capitalist narratives of planned obsolescence and asserting urban youth agency in the face of systemic exclusion.

Cross-case comparison and shared semiotics of resistance Across both cases, a common semiotic thread emerges: the deliberate visibility of manual traces (fingerprints in clay; stitches in fabric) as a signifier of embodied labour, connoting dignity (karama) against contempt (Hogra). The mythic opposition—authenticity/frugality (rural) versus irony/reclamation (urban)—converges on a broader ideology of material sovereignty: objects that refuse alienation by global supply chains. This semiotic resistance is performative, enacting alternative value systems where frugality is not lack but ethical abundance.

Regional comparators reinforce this pattern indirectly: while lacking explicit upcycling, traditions like Kabyle or Safi pottery similarly deploy geometric restraint as mythic assertions of cultural continuity against modernisation pressures. In Tunisia, however, the post-revolutionary context amplifies this into explicit ecological critique, with Chkarty's textile irony extending Sejnane's earthen frugality into urban waste streams.

Figure 5 exemplifies this layered reading on a Sejnane bowl, where the Berber triangle moves from literal signifier to mythic emblem of independence. These semiotic findings lay the foundation for subsequent layers, revealing how surface meanings inscribe deeper ethics of care and networked agency.

4.2 Material care layer: Embodied gestures and needs – ethics inscribed in making

Building on the semiotic foundations, the material care analysis (Tronto, 1993; Ingold, 2013) uncovers how vernacular design artifacts inscribe an ethic of care directly into their form and process. Care here is not abstract but materially enacted: through gestures of making, responses to identified needs, and outcomes that sustain dignity amid precarity. The rural-urban contrast reveals complementary yet distinct modalities of care—slow, earthen restraint in Sejnane versus adaptive, reparative ingenuity in Chkarty—both countering Hogra by prioritising relational sustainability over extractive efficiency.

Rural case: Sejnane pottery – care as slow correspondence with earth Sejnane artifacts embody care through deliberate slowness and intimacy with local materials. Gestures such as hand-coiling (building forms without a wheel), burnishing (polishing with stones for a subtle sheen), and incising motifs with simple tools leave visible traces—fingerprints, irregular rims, subtle asymmetries—that testify to embodied labour (Ingold's "correspondence"). These are not imperfections but ethical inscriptions: the artisan's body in dialogue with clay, resisting mechanised uniformity.

Needs addressed are profoundly practical: food security and preservation in a semi-arid region prone to drought. The vessels' thick walls and rounded forms facilitate evaporative cooling and long-term storage of grains or olives, while ergonomic handles enable women's daily labour without excessive strain. Care-receiving manifests in cooperative income (supporting ~150 women in 2024) and UNESCO recognition, translating manual gestures into social resilience. As Figure 5 illustrates, ergonomics of labour and preservation needs are materially embedded, enacting care that extends from individual gesture to communal survival.

Urban case: Chkarty textile upcycling – care as reparative reassembly Chkarty practices enact a reparative ethic of care toward urban waste streams. Gestures involve meticulous sorting of discarded fabrics, deconstruction (unpicking seams), and reassembly through hand-stitching or quilting—visible seams and patches become aesthetic signatures rather than

flaws. This "slow design" in fast-fashion's shadow echoes Ingold's emphasis on making as thoughtful engagement, where the artisan responds to the material's history (faded patterns, worn textures).

Needs centre on economic dignity and ecological restoration amid youth unemployment (~38% in 2025) and textile pollution. By transforming friperie remnants into marketable accessories, Chkarty addresses immediate livelihood needs while diverting waste (8 tonnes, 2023–2025). Care-receiving is tangible: income for 12 seamstresses (primarily women from vulnerable groups), skill-building, and community pride, as articulated by founder Teycyr Chtioui: turning "trash into something valuable" restores dignity (DRC, 2025). Figure 4 highlights how manual stitching and motif collages materialise this reparative care.

Cross-case comparison and shared ethic of care Both cases inscribe care through visibility of labour traces—fingerprints in clay parallel exposed stitches in fabric—signifying refusal of alienation. Rural care is rooted in earth-bound continuity (clay autonomy, resource independence), while urban care is adaptive reclamation (waste as dignified material). Together, they form a continuum: slow correspondence (Sejnane) extended into reparative bricolage (Chkarty), responding to Hogra's humiliations by fostering self-reliance.

Regional comparators, focused on preservation, indirectly echo this ethic: women-led transmission in Kabyle pottery or family gestures in Bahla prioritise intergenerational care over innovation. In Tunisia's post-revolutionary context, however, care becomes explicitly resistive—materialising dignity where state systems fail.

This layer transitions naturally to actantial analysis, revealing how care gestures reassemble broader networks of resilience.

4.3 Actantial layer: Networks and reconfigurations – from dignity to resilience

The actantial analysis (Latour, 2005) reveals how vernacular design artifacts function as pivotal actants in partial actor-networks, reassembling human and non-human relations to produce effects of dignity, autonomy, and socio-ecological resilience. Rather than passive objects, these artifacts actively mediate connections—between bodies and materials, villages and global markets, waste streams and ethical economies—countering the fragmenting forces of Hogra through subtle yet persistent reconfigurations.

Rural case: Sejnane pottery – networks of earth-bound autonomy In Sejnane, the pottery bowl or jar emerges as a hybrid actant linking human (female artisan, cooperative) and non-human elements (local clay, wood fire, Berber motifs). The clay, sourced directly from surrounding land, asserts non-human agency: its autonomy (unmediated by industrial supply chains) enables resource independence, resisting economic dependence on distant markets or state subsidies. Human gestures—coiling and incising—enrol the artisan's body into the network, while the finished object's ergonomic form and preservative function enrol daily household needs.

Key reconfigurations include: the cooperative as mediator translating manual labour into stable income; UNESCO heritage status enrolling global recognition to amplify local dignity; and the market (touristic or fair-trade) extending village networks outward without full commodification. As Figure 5 illustrates, these connections culminate in "resilience/independence"—an affect where Hogra's contempt is countered by self-sufficient material sovereignty. The non-human clay's "independence" underscores an ecological ethic: pottery that draws minimally from the earth while sustaining human communities.

Urban case: Chkarty textile upcycling – networks of reparative reclamation Chkarty accessories operate as actants in urban waste networks, enrolling discarded fabrics (non-

human) with youth labour (human) to produce marketable items. The fabric remnant—once alienated in landfill or fripérie—gains agency through sorting and stitching, becoming a mediator of value reclamation. Human actants (seamstresses, founder Teycyr Chtioui) enrol gestures of repair, while the ironic motif collage enrols cultural heritage against disposability. Reconfigurations are dynamic: NGO support (DRC) and collaborations mediate income generation (60,000 Euros annually); social media and fair-trade platforms extend networks to ethical consumers; and the zero-waste process diverts textile flows from pollution to circulation. The resulting affect—pride in "turning trash into something valuable" (Chtioui, DRC 2025)—produces dignity amid unemployment, reconfiguring urban precarity into resilient livelihoods. Figure 4 shows how visible seams and patches materialise these networks, transforming contemptuous waste into agents of empowerment.

Cross-case comparison and shared actantial effects Both cases demonstrate artifacts as "obligatory passage points" (Latour, 1987) in networks of resistance: Sejnane enrols earth/clay for rural autonomy; Chkarty enrols waste/fabric for urban reclamation. Human actants (predominantly women/youth) are central, but non-human elements (clay, discarded textiles) exert significant agency—autonomy in one, reparative potential in the other. Shared effects include dignity (countering Hogra) and resilience (income, recognition), extending to ecological justice: minimal extraction (Sejnane) or diversion from landfill (Chkarty).

Regional comparators, though preservation-focused, exhibit analogous networks: family transmission (Bahla, A'ali) or women-led continuity (Kabyle) enrol non-human clay in cultural resilience against globalisation. In Tunisia's post-revolutionary context, however, networks become explicitly politicised—artifacts reassembling fractured relations in response to successive crises.

This actantial layer synthesises the triptych: semiotics provides the "script" for meaning, care the embodied enrolment, and agency the performative reconfiguration. Together, they position vernacular design as a distributed politics of material resistance.

4.4 Synthesis: Vernacular design as performative resistance and material epistemology

The triptych analysis—semiotics, material care, and actantial agency—converges on a coherent synthesis: post-revolutionary Tunisian vernacular design functions as a performative resistance to Hogra while constituting a distinct material epistemology of care. Rural (Sejnane) and urban (Chkarty) practices, though divergent in form and context, share a logic of frugal reassembly that counters systemic contempt, economic exclusion, and ecological degradation.

Semiotically, both cases deploy a grammar of visibility: manual traces (fingerprints, stitches) as signifiers of dignified labour, evolving into myths of authenticity/frugality (rural) or ironic reclamation (urban). This shared refusal of alienation critiques capitalist disposability, enacting alternative valuations where "less" becomes ethical abundance.

In terms of material care, gestures of slow correspondence (coiling clay) and reparative bricolage (stitching waste) respond to intersecting needs—preservation in rural scarcity, livelihood in urban precarity—producing outcomes of income, recognition, and community resilience. Care here is distributed: extended to non-human elements (clay autonomy, fabric histories) in defiance of extractive logics.

Actantially, artifacts serve as mediators reassembling fractured networks: enrolling land/clay for rural independence or waste/fabric for urban dignity. Effects cascade into broader resilience—social (cooperatives, youth employment) and ecological (minimal extraction, waste diversion)—challenging Hogra's humiliations through quiet, material sovereignty.
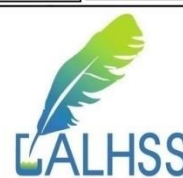
This synthesis positions vernacular design as a "material epistemology" (Ingold, 2013; Escobar, 2018): knowledge generated through relational making rather than abstract planning. In post-2011 Tunisia, where successive crises have eroded trust in institutional solutions, these practices offer subaltern ways of knowing—frugal, embodied, and resilient—that reconnect humans with materials and communities. Chkarty extends Sejnane's earthen ethic into urban waste streams, forming a rural-urban continuum of care that subtly disrupts hegemonic narratives of development and sustainability.

Regional comparators, focused on preservation, highlight Tunisia's distinct intensification: post-revolutionary precarity amplifies care into explicit resistance. Yet the shared Berber-Arab motif grammar suggests potential for wider diffusion, where heritage revival meets frugal innovation.

Ultimately, these findings illuminate vernacular design not as relic or curiosity but as vibrant politics: artifacts that perform dignity where words fail, fostering ecological justice from below in an era of converging crises.

6. Conclusion

Synthesizing the Argument: From Hogra to Material Sovereignty

This article began by interrogating a paradox of the post-revolutionary condition in Tunisia: how a decade marked by macro-economic stagnation and ecological fragility has simultaneously given rise to a vibrant, resilient mode of vernacular design. Through the comparative analysis of rural pottery in Sejnane and urban upcycling in Tunis, we have demonstrated that these practices are not merely survival mechanisms for the marginalized. Rather, they constitute a sophisticated material epistemology of care that directly counters the systemic contempt of Hogra.

By applying our theoretical triptych—material care, frugal bricolage, and actantial agency—we revealed that the Sejnane jar and the Chkarty tote bag function as parallel technologies of resistance. In Sejnane, resistance takes the form of continuity: the refusal to abandon ancestral clay for industrial substitutes asserts an ontological autonomy and preserves a "protective" semiotics against erasure. In Tunis, resistance takes the form of reparation: the alchemical transformation of urban waste into functional aesthetics critiques the violence of consumerist disposal. In both instances, the "act of making" (Ingold, 2013) restores the karama (dignity) that state institutions have failed to provide.

Theoretical Implications: Decolonizing Sustainability

Theoretically, this research offers a substantial challenge to the "technocentric universalism" that dominates global sustainability discourse. Our findings suggest that the most effective responses to Tunisia's water crisis and waste management failures are not found solely in imported green technologies, but in the pluriversal (Escobar, 2018) wisdom of the vernacular. The "frugal innovation" observed here is not a deficit but a strategic asset; it models a circular economy that is socially embedded rather than technically imposed. By treating artifacts as actants (Latour, 2005), we established that design objects in the Global South possess the agency to reassemble fractured social networks, effectively bridging the gap between ecological necessity and social justice.

Policy Recommendations and Practical Applications

The resilience enacted by these artisans should not remain on the periphery of national development strategies. To align with Sustainable Development Goals (specifically SDG 10: Reduced Inequalities and SDG 13: Climate Action), we propose three actionable pathways for Tunisian policymakers and educational institutions:

Curricular Reform: Design schools must move beyond Eurocentric Bauhaus pedagogies to integrate vernacular "bricolage" and local material sourcing as core competencies, validating indigenous knowledge systems alongside industrial design.

Public Procurement as Care: State institutions should prioritize the procurement of locally crafted, upcycled, and sustainable goods for public use, thereby converting "vernacular security" into formal economic security.

Ecological Heritage Protection: Recognizing the raw materials of these crafts (e.g., the clay beds of Sejnane) as protected ecological zones is essential to prevent their extraction by industrial brickworks, securing the material basis of this resilience.

Limitations and Future Directions

While this study leveraged a comprehensive visual-ethnographic archive to overcome fieldwork constraints, future research would benefit from longitudinal, on-the-ground participant observation to capture the evolving economic trajectories of these collectives. Furthermore, expanding this comparative analysis to include the oasis crafts of southern Tunisia (e.g., palm frond weaving in Tozeur) could reveal whether the "triptych of care" is a pan-Tunisian phenomenon or specific to the northern and coastal regions.

Final Thought

Ultimately, post-revolutionary Tunisian design teaches us that resilience is not a passive ability to endure shocks, but an active, creative practice. In the face of Hogra, the hands that coil clay and stitch waste are doing more than making objects; they are crafting a new political subject. They demonstrate that even when the political horizon is clouded by uncertainty, the material world remains a site where dignity can be touched, shaped, and held.

References

1. Al-Rawi, N. A. O. (2025). Visual narratives of dissent analyzing street art and protest imagery during the Arab Spring revolutions. Tercio Creciente, (27), 27–83.

2. Anzaldúa, G. (2004). Borderlands/La Frontera: The new Mestiza. In Feminist studies (pp. 653–662). Routledge.

3. Bennett, J. (2020). Vibrant matter: A political ecology of things. Duke University Press.

4. Bhabha, H. K. (1994). The location of culture. Journal of Postcolonial Writing, 2(2), 163–177.

5. Bhalla, S. (2025). How water sector reforms institutionalised domination and repression in Tunisia's authoritarian regimes. Environment and Planning C: Politics and Space, 43(4), 746–764.

6. Butler, A. M. E. (2020). "Art is intrinsically revolutionary:" Post-revolution performance art in Tunisia. Liminalities, 16(3).

7. Chekirbane, A., Khadhar, S., Hajji, S., & Ayadi, I. (2025). Editorial message: Special issue: Hydrogeology in Tunisia. Acque Sotterranee-Italian Journal of Groundwater, 14(1).

8.   Cross, N. (2023). Design thinking: Understanding how designers think and work. Bloomsbury Publishing.

9.   Cuccu, F. L. (2025). "You have a responsibility to tell this story": Vernacular security as decolonial research in Tunisia. In New directions in vernacular security research (pp. 199–223). Springer Nature Switzerland.

10. Danish Refugee Council (DRC). (2025). Upcycling for change: Impact report on circular economy initiatives in Tunis. DRC Tunisia.

11. de Certeau, M. (2002). The practice of everyday life. University of California Press.

12. Escobar, A. (2018). Designs for the pluriverse: Radical interdependence, autonomy, and the making of worlds. Duke University Press.

13. Guizani, M., & Orfi, J. (2024). Addressing the water crisis in Tunisia: Comparative analysis of sustainable solutions. In Proceedings of the International Conference on Sustainability: Developments and Innovations (pp. 103–110). Springer Nature Singapore.

14. Gunn, W., Otto, T., & Smith, R. C. (Eds.). (2020). Design anthropology: Theory and practice. Routledge.

15. Gutiérrez, A. (2020). When design goes south: From decoloniality, through declassification to dessobons. In Design in crisis (pp. 56–73). Routledge.

16. Heinrich Böll Stiftung. (2021). Incomplete decentralization: Solid waste management, local politics, and environmental activism in Tunisia. Heinrich Böll Foundation Tunisia.

17. Hibou, B. (2011). The force of obedience: The political economy of repression in Tunisia. Polity Press.

18. Ingold, T. (2013). Making: Anthropology, archaeology, art and architecture. Routledge.

19. Latour, B. (2005). Reassembling the social: An introduction to actor-network-theory. Oxford University Press.

20. Letsch, L. (2025). Navigating uncertainty: Identity, vigilance, and everyday security across border communities in Morocco and Tunisia. Cultural Dynamics.

21. Lévi-Strauss, C. (1966). The savage mind. University of Chicago Press.

22. Marzouki, N. (2021). Whatever happened to dignity? The politics of citizenship in post-revolution Tunisia. Middle East Report, 301. [suspicious link removed]

23. McDonough, W., & Braungart, M. (2010). Cradle to cradle: Remaking the way we make things. North Point Press.

24. Miller, D. (Ed.). (2020). Materiality. Duke University Press.

25. Pink, S. (2020). Doing visual ethnography. SAGE Publications.

26. Ponte, S., & Brockington, D. (Eds.). (2017). The green economy in the global south. Routledge.

27. Pratten, D. (2021). AbdouMaliq Simone, Improvised lives: Rhythms of endurance in an urban south. Africa, 91(1), 127–128.

28. Said, E. (1978). Orientalism. Pantheon Books.

29. Santos, L. L., Borini, F. M., Oliveira Jr, M. D. M., Rossetto, D. E., & Bernardes, R. C. (2022). Bricolage as capability for frugal innovation in emerging markets in times of crisis. European Journal of Innovation Management, 25(2), 413–432.

30. Sobhy, H., & Abdalla, N. (2024). Lived citizenship and the Arab Uprisings: Everyday politics, mobilization and belonging. Citizenship Studies, 28(6), 565–594.

31. Spivak, G. C. (2023). Can the subaltern speak? In Imperialism (pp. 171–219). Routledge.

32. Suchman, L. (2002). Located accountabilities in technology production. Scandinavian Journal of Information Systems, 14(2), 7.

33. Tronto, J. (2020). Moral boundaries: A political argument for an ethic of care. Routledge.

34. UNESCO. (2018). Pottery skills of the women of Sejnane. Intangible Cultural Heritage Lists. Retrieved from https://ich.unesco.org

35. World Bank. (2025). Tunisia economic monitor: Navigating the crisis. The World Bank Group.