Materiality & Marginality:

Object-Oriented-Archaeology in Medieval Icelandic Architecture

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Abstract:

This paper attempts to disrupt three broad concepts that frequently arise in archaeological discourse: 1) architectural materiality; 2) artifact-oriented interpretation; and 3) ecological marginality. These concepts will be confronted through the analysis of a fifteenth-century fishing station on the west coast of Iceland that has been under excavation since 2011. This analysis draws heavily on contemporary strands of object-oriented philosophy, as it has been deployed in archaeology, to explore the causal emergence of architectural structures. Non-narrative (poeticized) interpretations of materiality, artifact, and marginality are put forth in order to queer what are presented as normative tendencies of narrative interpretation, such as the conquering and accumulation of time. The thesis herein is that this narrative conception of time conceals underlying interactions and relationships that constitute causality and change. Thus, destabilizing the narrative veneer of time is critical to appreciating possible responses to ecological variability by human populations, past and present.

Keywords:
Queer, Object-oriented ontology, Ecology, Iceland, Materiality, Architecture, Marginality

Introduction

Architecture has been conceived of as the intentional arrangement of materials (Flusser 1999; Hodder 1994; Norberg-Schulz 1965; Preziosi 1979). From the nests of birds to the penthouses of billionaires, architecture is often conceptualized in terms of congruency between function and aesthetic. The balance between aesthetics and utility and the fusion of the two has been critiqued by architects for centuries (Kruft 1994; Torroja 1958). These discussions should be of at least moderate concern for archaeologists, as the excavation of structures (architecture) forms a critical body of archaeological evidence. However, as archaeology tends to study architecture 'in reverse', it is also capable of circumventing or critiquing some of architecture's positions. The aim herein is to attempt such circumvention by presenting an *unintentional* approach to the form of architectural structures. Archaeology starts from a form and works backwards, arriving at an intention only after interpretation, if ever. This perspective exposes

intentions as less consequential to structure than traditionally conceived in architecture. The position here is that structures are not the outcomes of the homogenous intention of a single agency. Rather, the plurality of objects from which structures are composed render individualistic notions of intention obsolete. Architectural structures emerge from the relationships and resistances of objects.

The structure this study examines is a multi-phase fifteenth-century fishing station on the westernmost extent of the Snæfellsnes peninsula in Gufuskálar, Iceland. A misrepresentative narrative that archaeology or architecture may put forth about this structure is that it was made by humans engaged in commercial fishing out of locally sourced stones to serve as a residence and initial processing point for the export of fish. This is not a false narrative, but is limited by the restraints of the narrative medium of exposition. No single element of the above narrative may be denounced as false, yet the semantic register of the narrative is certainly misleading. It privileges the agency of human intention in explaining the arrangement of materiality in a manner that will be problematized below.

Applying a non-narrative form of knowledge production to the interpretation of the Gufuskálar fishing village allows an appreciation for the site that is more attuned to a materialist reality. We will attempt this alternate mode of knowledge production by borrowing from object-oriented philosophy. Using this realist strand of thought, a queered interpretation of ecological interaction in Medieval Iceland will be offered. This interpretation confronts the dominant narrative approach to knowledge production, which normalizes themes of accumulation and the overcoming of space and time. Specifically, we examine three domains (architectural materiality, artifactualization of objects, and ecological marginality) as they pertain to the Gufuskálar fishing station.

Gufuskálar serves as an ideal site for this investigation as its location is considered by many to be both ecologically and culturally marginal (Hulme 2011). Resources traditionally exploited by agricultural populations are few (such as timber), the climate is erratic and antagonistic (even more so during the time period under investigation), and the village is separated by great distances from the economic centers which control the fish trade in the North Atlantic. Yet, despite these notable handicaps, the problematized notion of marginality presented herein reframes Gufuskálar as a demonstration of how populations engage with (as opposed to overcome) the resistances of their neighboring objects.

Objects + Causation

A number of archaeologists have begun to latch on to realist-materialist strains presently trending in philosophy (Witmore 2012; Alberti et al. 2011; Olsen et al. 2012). These trends may fall under the banner of speculative realism, object-oriented-ontology, post-humanism, new materialism, or some variation of these terms. This general line of thought is indebted (often implicitly) to the work of Bruno Latour and Donna Haraway in their efforts to liberate agency from the domain of human intention. As Fowles (2013) has noted, much of this realist-materialist turn comes as a response to the excesses of post-modernity's destabilization of reality and knowledge. The particular stripe of realism adopted here is Timothy Morton's queer ecology (2010), which borrows heavily from Harman's object-oriented-ontology (OOO) (2007). This thickly developed theory and all its proprietary language cannot be completely recounted here, but offered below are a few implications of the theory that have immediate relevance to archaeology (or at least this rendering of archaeology).

Within OOO, objects are the entities out of which the universe is made, full stop (Harman 2010). These objects are not bounded or sterile, nor are they necessarily material or tangible. These objects are dynamic engines of causality that include materials, processes, ideas, forces, and relationships (between objects). Further, the many forms that objects may take are all of equal regard in their capacity to induce causes and effects. For the object-oriented archaeologist this allows populations, agricultural revolutions, temples, potsherds, cosmologies, gravity, wind, or dirt to be examined as equal actors, agents of change, and causal participants. While it may be difficult to accept that the Gulf Stream, Harry Potter, or a hammer have equal capacity to engender causal dynamics, there are compelling reasons to apply this philosophy to archaeological analysis, as attempted below.

Particularly enticing for archaeology is that all objects, no matter how closely x-rayed, described, excavated, or otherwise examined, never allow total access to all their properties and attributes. Every object is coyly withdrawn. Much like the worlds which archaeology investigates, all objects only ever offer a glimpse of their total selves, remaining inaccessible to the present observer. This is equally true for the objects known as the stock market, the pebble in your shoe, or Çatalhöyük.

Why must objects, such as a lithic tool, always withhold the totality of their capacities from other objects? Most simply, if it were possible to engage all the attributes of a lithic tool there would be no affordances left for that tool to be something else. That is, the tool could not manifest or participate in change (causal dynamism). Objects are malleable because they have withheld elements of themselves, and malleability is a prerequisite for engaging in change, causality, and time. Malleability allows causality and time to emerge. If something were unchangeable, it would be *out of time*. The endless withholding of affordances is what gives

objects the capacity to change. Thus, Harman's justification for the foundational withholding of objects accounts for time itself – another subject dear to archaeologists! If objects did not withhold something of themselves, they could have no future state. In eliciting their novel affordances through interaction, objects *make time.* Time is not an empty container that is filled by vulgar materials, rather time is performed and created by the interaction of objects. This general framing of time as an emergent property has gained many adherents in the twenty-first-century across the social (Barad 2007; Povinelli 2011) and physical sciences (Smolin 2013, Arkani 2013).

To reiterate, OOO states that 1) objects always withhold their totality from the present, and 2) time emerges through the interaction of objects. The temporal withdrawal exhibited by the worlds that archaeology studies, then, can be viewed not as an impediment to be overcome by diagnostic and methodological rigor, but rather as the baseline of a materialist reality. This means that archaeology need not *fill in* absences, as the world is a perpetual drama of absences. Rather, archaeology may concern itself with how the materiality it encounters through excavation performed and generated time (or failed to).

The real conceptual difficulty with this is often simply the willingness to classify *everything* as such a dynamic object—to fully commit to a flat ontology. Many objects archaeologists encounter are temporally and spatially extended beyond anthropocentric perception and appreciation. While the pollen of a tree is an object, so are the tree, the forest, ecosystem, and biosphere of which it is a part. The attempt here is to interpret a multi-phase fishing station in Iceland that incurs numerous changes in aesthetic and function as such an object. This fishing station is not simply the exhaust of human utilitarianism, but a performance of object integration.

Context + Excavation

The site of Gufuskálar is situated on the Western coast of the Snæfellsnes peninsula. It lies directly under the Snæfellsjökull mountain glacier. The combination of coastal and glacial weather patterns can produce drastic shifts in wind velocity, wind direction, and precipitation levels. The coast is predominantly rocky, and the seas can be tempestuous during winter stormy seasons inducing significant coastal erosion. These geographic factors make the Gufuskálar climate and topography a very resistant presence in conducting human activities, but also a compelling research site for attempting to better appreciate the capacities of cultural response to environmental variability (Pálsdóttir 2013).

For the time period of interest, the fifteenth-century, it is suspected that these environmental conditions would have been even more erratic and burdensome to humans attempting to carry out subsistence and economic activity due to the 'Little Ice Age' – a prolonged period of lowered winter and summer temperatures, as well as increased storminess and glaciation that lasted from approximately 1350 to 1850 AD (Matthews & Briffa 2005). However, recent ecodynamic scholarship has questioned how much the Little Ice Age period affected the hour-to-hour, day-to-day, year-to-year perceptions of the populations it actually impacted (Dugmore et al. 2007).

Four years of excavation and survey have demonstrated that Gufuskálar served as a proto-industrial fishing port of at least regional-scale significance. This conclusion is based on extensive midden deposits, identification of keel marks, identification of many as-of-yet unexcavated fishing stations and farm mounds by aerial photography, and identification of numerous fish drying sheds in the lava fields further inland (more on these below), as well as

scattered historical documentation (Pálsdóttir 2013). The most conclusive evidence for the proto-industrial nature of Gufuskálar comes from the excavated zooarchaeological remains, including over a meter of processed fish middens accruing in less than a century. Further, historical and ecological evidence strongly suggests that the Gufuskálar fishing village was only a seasonal residence, occupied during the winter fishing season when cod populations would have been more numerous.

Among the evidence for a novel commercial venture is the complexity of the Gufuskálar fishing station structure itself. Excavations have revealed multiple phases of reconstruction and maintenance, including aesthetic design shifts, which may signal a drastic functional or ideological transition for the structure. There is no 'ideal' Gufuskálar fishing station. The fishing station is a perpetual shifting performance. The suspicion is that each winter upon their return the inhabitants would have to rebuild and redesign elements of Gufuskálar structures owing to damages incurred while they were away or to prepare for expected conditions. The architecture and time period of the Gufuskálar fishing village both stand out in comparison to contemporaneous activity in Iceland. Earlier fishing residences excavated to the North are primarily small, low to the ground turf hut designs. To what extent the commercial fisherpeople residing at Gufuskálar were native Icelanders or entrepreneurial continental Europeans remains an open question as well. If non-natives were residing, fishing at, and maintaining Gufuskálar, this may go some way toward explaining the unique architecture. Further, this period is traditionally associated with great poverty in Icelandic commercial enterprise (McGovern et al. 2007).

The exact sequencing of the phasing can be fuzzy because of the short duration in which reconstructions transpired, but the "Gufuskálar era" seems contained within the mid fifteenth-

century, roughly between 1420 and 1480 CE according to the ^{14}C results (Pálsdóttir 2013). Margins of error of any more than five years on a radiocarbon date are, however, problematic when investigating sites which span less than a century, especially those that are only seasonally inhabited. Datable material is difficult to precisely associate with the movements of any single stone. Thus, identifying sequences of construction primarily demands knowledge of architectural construction.

However, while this could be seen as a chronocentric 'problem' of associating phases with dates, we could use this ambiguity as an interpretive diagnostic. Rather than just concluding that we *cannot know* the precise sequence of construction of these fishing shacks, we can affirm that there is evidence of a highly dynamic and malleable relationship between the human occupants of fifteenth-century Gufuskálar and the structures they inhabit. The relatively short duration in which the numerous reconstructions were undertaken at Gufuskálar suggests that its inhabitants were comfortable with changing and shifting the relationships between the structure, its occupants, and the innumerable other objects in the surrounding environment on a fairly regular basis. This cultivation of novel as opposed to durable interactions is precisely what is advocated among ecological resilience theorists (Salt & Walker 2006), and also signals a more contingent and less teleological perception of the environment.

The current excavations have done much to dispel the notion that Medieval Icelandic fishing was a poor person's enterprise, and that those who occupied outposts such as Gufuskálar lived in squalid conditions. Zooarchaeological excavation suggests that those who populated the structures of Gufuskálar were eating quite well, or at least had access to high-value foods and diversions (Feeley 2012). Medieval economic conditions throughout Iceland are easy to misrepresent as being "beneath" those of the rest of Europe (itself not enjoying its greatest boom

years). This is primarily because of a lack of disproportionate (unequal) wealth in Iceland, at least on the levels that appear in Europe. However, lack of wealth cannot be directly associated with conditions of poverty. As others have pointed out poverty is an ascribed classification (Kallis 2011). Medieval Icelandic society exhibited fewer tiers of hierarchy than mainland Europe, but this is not evidence that its population was *wanting* in material or subsistence. That is, in many cases what is seen as evidence of wealth could more accurately be interpreted as evidence of inequality. The marginalization that has been ascribed to Medieval Iceland has often been attributed to a combination of harsh climates and poor environmental stewardship by the Icelandic people. However, current research is questioning these assumptions as well (Hicks et al. 2013).

Along with this, traditional metrics of "success" itself are also in need of questioning. Success has too often been unreflexively correlated with productivity, efficiency, and longevity. Clearly, the employment of these concepts as primary indicators of success can evidence a retroactive normalization of modern economic principles, detrimentally embedding capitalized forms of knowledge production. The use of these ideas as primary indications of success represents a narrow narrative conception of time, space, and causality, which favors accumulation and overcoming. Just because an institution lasts for a long time, does not mean it is successful. If productivity, efficiency, and longevity are taken as the primary indicators of success, then the Atlantic slave trade could be considered a highly successful human endeavor.

Materials + Misconceptions

As an architectural material, stone often carries a reputation for stability and permanence. Understandably. As inorganic objects, stones are not subject to the same senescence processes as

biological entities (such as wood). They are not subject to the functioning of a central nervous system to sustain themselves. Plus, they can be terribly heavy. However, as objects engaged in the manifestation of causality and time, they are every bit as dynamic and nimble as archaeologists.

Epic megalithic structures of Western Europe, such as Stonehenge or Carnac, certainly encourage the misconception that stones are timeless, inert objects, docilely submitting to human intention. Though, just like the Gufuskálar fishing stations, megaliths endured continuous restructuring – in the case of Stonehenge over a millennium of renovation took place (Bradley 1991). These stone structures, taken as objects, are as malleable and active as city skylines, which is to say they are familiar and habitual, but by no means permanent or finished. Nor are stone structures sterile when in use. To those who interacted with Gufuskálar fishing stations as objects (and not as artifacts) they may have been much more plastic than our presentist prejudice inclines us to believe. Like the Empire State Building's flickering lights and elevators, the objects within and surrounding Gufuskálar fishing stations had operationally moving parts. The "moving parts" of the Gufuskálar stone structures (or Stonehenge) may not have been mechanical or automated, but like the elevators of the Empire State Building, the hearths, doorways, or bone deposits at the Gufuskálar fishing station actively engage in the performance of structure. A doorway does not have moving parts, but a doorway is still a machine in the sense that it transforms the state of an entity crossing its threshold (i.e., you're transformed from being outside to being inside or vice versa).

Human intentions may directly interact with stones or buckets of soil, but each material offers its own resistances, so that all the materials are complicit in the construction of any given structure. Intention is rarely ascribed to rocks, but the properties (resistances) which they exhibit

at any given time exert a very tangible effect on humans and other objects. Humans cannot walk through stone walls, wind must go around a stone, rain drops slide down the surface of the stone. Though it may appear a dormant lump of inert matter, as an object interacting with others, stone is an equal player in causal arrangement and the manifestation of time. The relationship between the stone and the human causes novel affordances to emerge from each. The same is true for all the objects that meet at the Gufuskálar site. Each interaction between a gust of wind and a stone creates a relationship (another kind of object according to Harman's OOO), which possesses characteristics that neither weather nor stone possess on their own. This relationship is a vibrant agent, capable of interacting and inducing change.

Along with stone, the Gufuskálar fishing station is composed of infilling between the stones. This largely consists of sandy soil and a few fish bone deposits, but the intrepid archaeologist could discern a great number more objects holding up the walls at Gufuskálar. The walls of Gufuskálar are equally made of objects such as *demand for fish*, *international trade monopolies*, and *climate pressures*. Thus, the architectural structure being excavated at Gufuskálar is an object which is amenable to the material properties of having fish middens fill in the gaps between the stones, of having sandy soil serve as infilling, of being able to endure temperatures in a fluctuating descent, of being able to accommodate violently shifting winds, of being able to produce enough product to profitably exist, of being able to withstand (or not) changes in global economics which made cod fisheries wax and wane in importance, of being able to represent legal and moral codes that shift with the prominence of the Church in local life.

Some of these objects may be considered as more or less intentional than others, but regardless of how "conscious" any object involved in the network of relationships which composes the Gufuskálar fishing village may have been, all have equal footing in the induction

of causality. If the stone corrodes, the rains deluge, the fish don't bite, or the economy tanks, each of these instances has equal impact on the viability of the Gufuskálar fishing station as a structure and object. To ask what the *intended* use of the Gufuskálar fishing architecture was ignores the multitude of non-intentional agents that are indispensable in the construction of this structure. *Objects work together to make locality emerge.*

Artifacts + Absence

The stones archaeologists study (Stonehenge, Acheulean hand axes, or Icelandic fishing stations) are objects which at some point ceased (re)producing meaningful relationships with humans, and thus (for humans) at some point *fell out of time*. From an anthropocentric gaze, these stones no longer appear to be objects, but rather dead materiality not participating in causality. They have become artifactualized. Treating these objects as artifacts takes them *out of time*. This artifactualization defies the material reality of stones as objects and may be amended by employing an object-oriented archaeology (as opposed to artifact-oriented).

Just because an object with which humans once interacted, such as a Gufuskálar fishing station, undergoes a duration without interacting with humans does not mean it is not creating relationships with other objects. The stone-dirt relationship and the stone-gravity relationship remain as vital as ever. However, these relationships do not manifest time (change) on a scale that is familiar to human populations. It is difficult to break the anthropocentric notion that human time is the only kind of time. Conflation thus occurs among researchers between the apparent stagnation of an object and the exclusion or redundancy of human interaction. Archaic stones continue changing and interacting daily, albeit without human intentions or meaning. Thus, artifact-oriented archaeology tends to view archaic stone structures as standing still,

unchanging, dormant, awaiting re-integration into human meaning through "discovery" and interpretation.

However, for those who interacted with, maintained, and rearranged the Gufuskálar fishing stations (or Stonehenge), these structures and their constituent stones were objects, not artifacts. Interpreting Gufuskálar as an artifact is fine, but an object-oriented interpretation promises a more symmetrical appreciation of the past populations that inhabited the station. The Gufuskálar structure was an active participant in the causality of the lives of its inhabitants, as they were faced daily with the resistances the stones offered to human intention, wind, rain, or the smell of fish. Take the human intention out of the equation and the stones are still putting forth resistances to which wind, rain, and the smell of fish must react. The relationship between a human and a wooden gaming piece creates time as different elements of each are revealed to each other, but the same can be said of the relationship between the gaming piece and the dirt that occludes it. Interaction precludes causal stasis, but interaction does not need intention.

Again, humans only tend to notice time in which they are implicated. The stones that compose the walls of the fishing station, whilst they remained buried under the soil were still interacting with the dirt, worms, climate, geology, and the memories and imaginations of a few humans. Thus, these buried objects were still manifesting causality and time, but time at a non-human scale. By artifactualizing them though, archaeologists deny the objects' capacity to change, deny the capacity to become something other than their present incarnations, deny the capacity to make causes and effects. This artifactualization of objects of past human interaction goes as far as sealing away these castrated objects behind layers of thickly securitized glass in museums, hermetically isolating them from further interaction.

There is a confused grasp of absence. That which is absent (not-present) is often viewed as lifeless and non-causal. That is, the proto-industrial fishing community at Gufuskálar is not-present, it is absent. Artifact-oriented archaeology views this condition as inhibiting the capacity or affordance for change (causing effects). Object-oriented-archaeology contends just the opposite. It is the absences from which time-space and causality emerge. The present (at hand) is the veneer or façade, aesthetically sterile, presenting various properties, attributes, and adjectives. Within the absent is the possibility of emergence, thus change and causality (verbs). The impetus behind Gufuskálar's repeated renovations was always something that was lacked—an extra wall layer for warmth, a new doorway to the North, a new hearth. Objects (humans, stones, dirt) work together to draw out what is absent. Objects work together so novelty can emerge (*make time*).

Object-oriented philosophy complicates matters for archaeologists who wish to produce knowledge from artifacts. Artifacts, as traditionally conceived, are the antithesis of objects. They are presented as "finished," no longer contributing to the manifestation of duration or causality. Artifact-oriented archaeology wishes to present its subjects as exhausted of causal novelty. This theoretically allows for an interpretive rigor, which diligently applied will yield a discernable map of human action, motivation, and meaning, but the "map is not the territory." The artifact *describes time* in a way humans can interpret, while the object *makes time* indifferent to human interpretation. Certainly, it is harder to *understand* a moving target (causal object) than inert materiality (non-causal artifact), so perhaps instead of *understanding* as museum captions attempt, the goal should be *appreciating* objects with which humans have interacted in the past. To supplement Indiana Jones, perhaps artifacts belong in a museum, but archaeology most certainly does not!

Marginality + Narrative

The notion of marginal is not too dissimilar from that of poverty or success. These notions suggest a deviation from a baseline of socially normalized levels of want or ecological stability, but just as the uncontacted hunter-gatherer does not "realize" they live in poverty, the Inuit does not "realize" they live in a marginal habitat. Among populations that have acclimated to "marginal" climates, instability is "normal" and expected, which raises the question of whether unstable is an applicable adjective for these regions. Dugmore's work on experienced deviations from mean temperature during the Little Ice Age is helpful here (2007). This research suggests that annual perception of change may have been negligible. The Little Ice Age is an object that may have been locally invisible to those alive during its existence, and only retroactively observable by researchers today. That is, those who directly interacted with the Little Ice Age may have lacked the dimensional perspective to grasp the magnitude of the object with which they were dealing. Morton calls objects of this kind "hyperobjects" (2013).

If the Little Ice Age is considered a hyperobject, it implies that deviations from mean temperature, storminess, and glaciation, which can be clearly measured today, may not have been experienced as so deviant. Thus, the climatic (hyper)object known as the Little Ice Age may not have disproportionately influenced the *intentions* of human populations, countering any lingering climate determinism. As an object, the Little Ice Age certainly played a part in inducing change—that is what objects do. However, it was not singularly determinative of any causes or effects. The Little Ice Age emerged from the interaction of disparate objects circa 1350 AD, then began interacting with the resistances of other objects to elicit novel affordances, in

turn generating change (new objects). Objects do not perform this operation *in time*, rather objects doing this *is* time.

Deterministic narratives regarding the European settlement of the North Atlantic, such as "it got cold and they (Norse settlers) died," have been vehemently dismissed by archaeological and ecological research over the past two decades (McGovern 1991). However, underlying this outdated sentiment is a conception of "success or failure" in the face of an adversarial Nature, and this conception of human-ecology relations still tends to persist. Regardless of whether the humans are the "heroes" (The Orkney, Shetland, or Faroe Islands) or "losers" (Greenland, Rapa Nui, Maya) of the narrative, producing knowledge in this manner allows ecological causality to be viewed as an individualistic process—be the individual a person, population, worm, or climatic event. As our efforts to deflate intention have attempted to show, it is a chorus of objects entering into relationships that fuels causality.

Human intention or ingenuity does not *fail* to *overcome* any adverse conditions, rather human presence becomes increasingly or decreasingly relevant for the capacity of an ecosystem to elicit novel affordances from the multitude of objects it hosts. That is, human presence becomes a more or less important agency in inducing change and *making time*. If human presence is stifling the emergence of new relationships between objects, human presence becomes expendable. If human presence is cultivating new relationships, human presence flourishes. The advent of agriculture is an example of human presence eliciting all manner of new capacities from withdrawn objects (species) in their environment, which led to much of humanity's Holocene flourishing. Today, however, industrial agriculture suppresses the diversity of ecological relationships, with its strict mono-cultivation and pesticide regime.

The flux measured in climate during the occupation of Gufuskálar appears echoed in the persistent re-modeling and re-constructing of the fishing stations. This makes evident how little influence macro human intention has on the causes of forms. To presume a rather safe intention of the human populations that utilized the fishing stations at Gufuskálar, it may be said that they wanted to build a structure that would allow fisherpeople to reside close to the shore and prepare their catches for export to a world market. However, when a hyperobject like the Little Ice Age manifests itself locally in the form of freezing rain it contours this intention. As excavations have revealed, habitations underwent several phases of construction and reconstruction (changes, causes, and effects). This is evidence that other objects were consistently resisting and reformatting human intention. What actually manifested the Gufuskálar fishing station structures was not the end product of any intention, but rather the negotiation of a symbiotic agreement between the agencies ("desires") of all the objects that were localized within that region. Non-local objects such as the Little Ice Age or the international fish trade, existed at far larger scales than any individuals at Gufuskálar, but their properties emerged locally (e.g., higher wind speeds and prioritization of profits).

The excavated structural remains at Gufuskálar suggest constant maintenance and reengineering of their architectural structures. There is a marked transition from rectilinear to curvilinear architectural style fairly early in the sequence of construction. This rapidity of change in the structuring of stone edifices is interpreted here as evidence that human activity (though not intention) was an indispensable object in the manifestation of causality (causes and effects). This demonstrates how, in a place and time of ascribed marginal ecological conditions, human populations may make themselves integral objects in the generation of time (or in narrative terms, allow populations to survive or "succeed"). It is not through efforts to build stable,

permanent, well-fortified structures that protect against the inhospitable resistances of other objects in the environment that a population sustains itself in marginal conditions. Rather, it is through deeper investment into relationships with surrounding objects that human-objects can make themselves integral to an ecosystem's capacity to produce change.

Intention may help explain why humans perform certain actions but does not effectively explain cause and effect. A vivid example of this is the fish drying huts that dot the lava fields just to the East of the Gufuskálar fishing village. These huts are about a kilometer inland and reside at a higher elevation than the coastal settlement. By building these huts and hanging caught fish in them, the fish dried out fast and thoroughly, allowing them to be transported further afield for commerce. Here it could be said that the human residents of Gufuskálar intended to dry their fish. This may explain human actions, but it does not explain anything about why the fish corpses responded to the wind's behavior as they did, nor does it explain why the wind responded the lava rocks' behavior in the manner it did. Intention is not an explanation for causation or the generation of novel time. Isolated experiments can be conducted to determine what wind exposure tends to do to the liquids in organic matter, but this brings us no closer to a causal explanation than isolating human intention. Intention is one object interacting with others. Wind is one object interacting with others. One may be tempted to draw from this that it is human intention and wind working in tandem to dry the fish, but this too would be simplistic. The fish must cooperate in being dried. That is, the properties of fish that wind is capable of interpreting must be dryable. The resistances of the fish offer a form of consent to the wind. The attribute "dryable" is elicited from the dead fish—the fish is not carrying around this property on a day-to-day basis.

Change (time & causality) is happening with or without intention. Intention is a red herring in causality. In the above sequence the novel properties of the fish (its capacity to be completely dried out) are elicited through its interaction with wind. This was not a property of the fish that it was just carrying around, it emerged through the interaction with another object (wind). The emergence of this novel affordance is time. As Bennett has lucidly pointed out intention and agency are not the same (2005), and conflation of the two leads to deep confusions about causality.

By the same token, it is not the intention of any populations or governments (lest they be masochistic serpents) to deteriorate the global ecosystem to the point of mass extinction, yet the aggregate result of how we interact with other objects forebodes just such a catastrophe. Causation is far more connected to interpretation than intention—how wind interprets fish, or how the atmosphere interprets CO2.

Conclusion

The primary aim of this article has been to reduce the emphasis on intention and narrative when archaeologists undertake the job of interpreting architectural structures (though we feel a similar approach could be applied to interpreting other objects of archaeological inquiry). To that end we have tried to present the argument that the causality that manifested a structure in Iceland dating to the fifteenth-century was not the outcome of human intention, but rather the result of objects interacting and eliciting their withdrawn qualities from each other through the emergence of novel relationships. Intention was certainly an attribute of the human-objects interacting to produce Gufuskálar, but these intentions were elicited from humans via their interaction with the weather-objects, fish-objects, or economy-objects. Humans have an endless reserve of intentions,

but they must be drawn out through interaction with other objects. While wind or soil may not possess the attribute *intention* (as we know it) they possess many qualities that humans do not. Humans must confront these wind-attributes, just as the wind in its movement must confront human intentions.

The insignificance of intention can be magnified by looking at all the *effects* the Gufuskálar-object has *caused*. Certainly, it caused a lot of fish to be caught in the fifteenth-century and a few people made money off these fish, but it also caused two archaeology graduate students to fall in love during one season of excavation. Hopefully in the near future, if permission and funding are obtained, the fishing station will cause the effect of establishing a research and learning center in a former Coast Guard training facility near the site. These seemingly disconnected occurrences are just as valid effects of the existence of the Medieval architecture at Gufuskálar as are any operable intentions of fifteenth-century fisherpeople.

This is not to say that intentions or desires do not exist or to diminish human agency as beholden to structural constraints. Rather, the point is that the "intentions" of all objects are on equal footing. Even though a stone may not be *aware* of any intention, it is no less a player in the manifestation of causality. It takes the interaction of (at least) two objects to manifest changes (time) in the ontology outlined here. The implication of this is that time is a creative emergence, not a passive background to be endured or overcome—objects *make time*. This poeticized notion of generating time through interaction counters prevailing modes of human knowledge production (archaeology included) based on narrative extrapolations of time, which aim to overcome or accumulate time. If origins are studied as an endeavor to *make time* as opposed to conquer time, it exposes exciting new queered strategies for knowledge production. Specifically, in our present era of ecological peril, strategies can be explored that are not based on building

our way out of predicaments through constructing rigorous narrative intentions, but rather through exploring new ways to elicit the withdrawn qualities of objects via novel interactions.

The aim herein is to shift from the narrative question, “what did human populations do wrong or right (as pertains to maintenance of the ecologies in which we find ourselves),” to “how can we engage and enmesh with a more diverse range of objects in our ecologies?” It is through ingratiating and integrating ourselves with other objects that our relationships become indispensable to the manifestation of time, and our presence becomes an indelible component of an ecosystem.

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