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Formalizing Marginality: Comparative Perspectives on the 19th Century Irish Home

There are different ways of visualizing a community. One might see it holistically as a homogenous, united mass, or otherwise chopped into fragments framed by more 'fine-grained' social similarities and differences. Or we might view it administratively, seeing a structured 'top-down' perspective of economic systems and political geographies, contrasted by the individualized household – characterized by an examination of how the experience of the individual is 'played out' in reaction to the social context in which one lives.

Any way we might chose to approach our visualization of a community will inform us differently about the dynamism that characterizes social life. A broad-contextual framing to community structure tends to produce more institutionally focus analyses, making evident the means by which a community is organized as a whole and, perhaps, the premise of investigating social outliers to that otherwise 'structured' system. Alternately, a household approach tends to be more personal in nature, an investigation of the 'nitty-gritty' of everyday life within the system – the interactions and experiences of the quotidian resulting from the larger community framework. Regardless of the point of view we chose to take, how we decide to address our perspective towards 'community' has a profound impact on our visualization of the different scales in which 'community' is enacted.

My project is an initial step into merging scaled perspectives of community through digital platforms. Recognizing the difficulty in utilizing multiple threads of data to construct a multi-scalar imagining of the nuanced elements that contribute to the networks of implicit community structure, the aim of this project was to break down these conceptual barriers and explore a multi-scalar, accessible and visually coherent means of understanding facets of community dynamics. Using the abandoned island of Inishark in rural western Ireland as a case study, I utilized four existing historic maps alongside census information, oral histories, and digital archaeological datasets (primarily LiDAR) that each showed the island community in a different light through various points in time. To combine these resources and create my imagined visualization I employed open-source GIS software (GRASS) that enabled creative incorporation of these various data-types. Initially, I geo-referenced the historic maps (representing the community in 1816, 1838, 1898, and 1911) with LiDAR data (a remote-sensing technique that creates maps by measuring light reflected over certain distances) of the island collected in 2010, and identified historic structures appearing on the maps that corresponded with those existing in the landscape today (Figure 1).
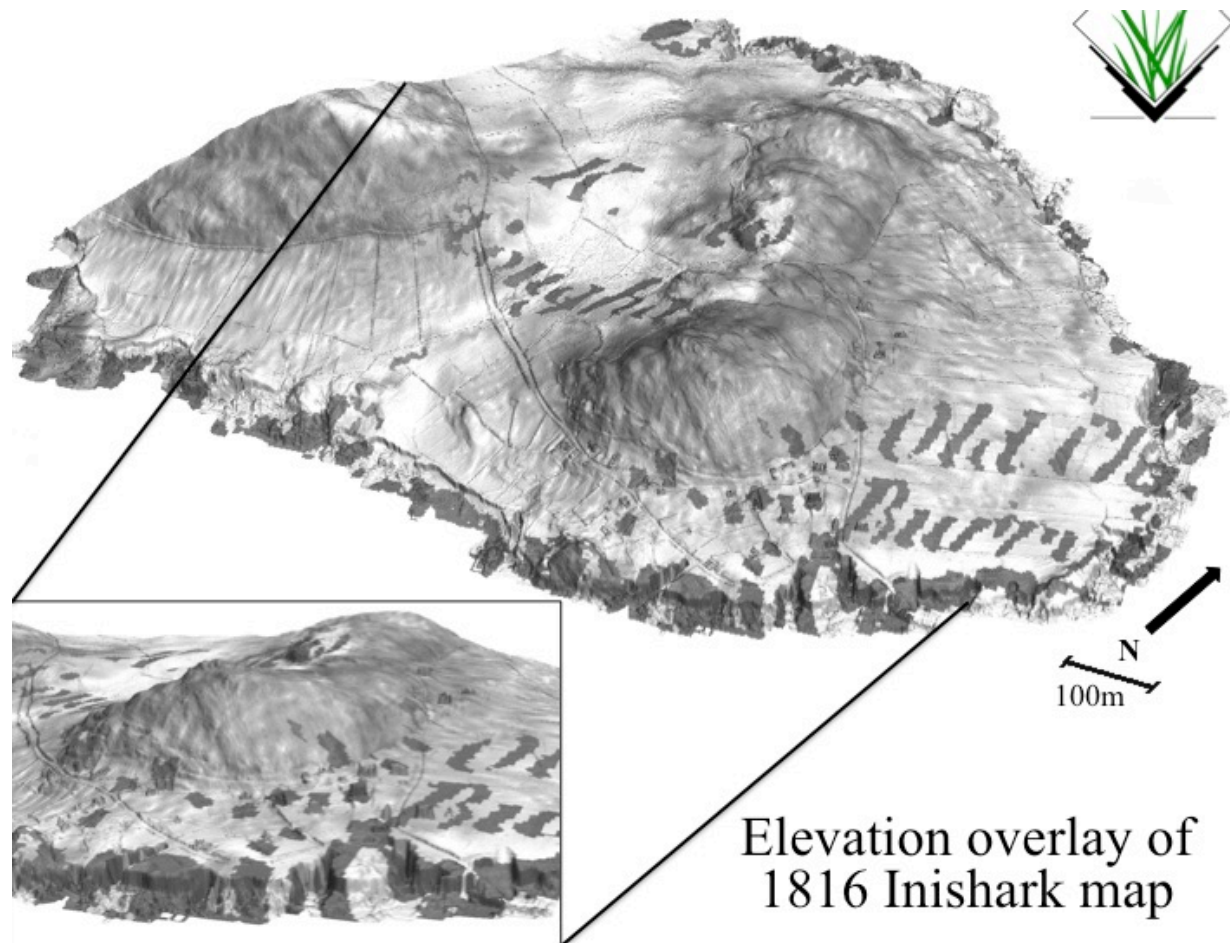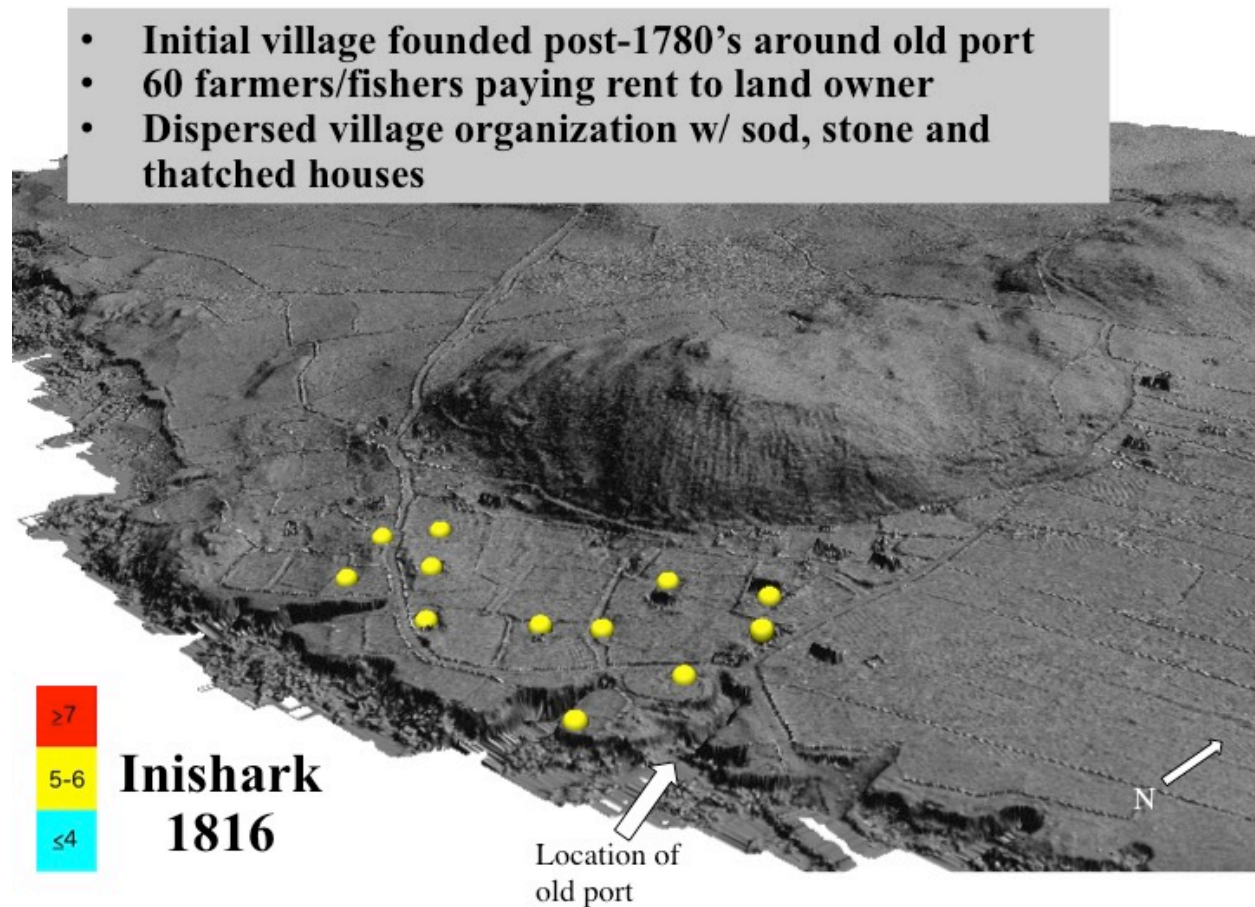
(Figure 1 – 1816 map overlaying the LiDAR elevation map for Inishark, Ireland)

Using these overlays, I created vector maps of community iterations over time, gaging the distribution and overall layout (or 'footprint') of the community as it grew and shrank in response to larger social pressures occurring in Ireland during the late 19th and early 20th centuries. Using existing census data (from 1901 and 1911) and oral narratives provided by members of the neighboring community (which is still active to this day), we (Dr. Ian Kuijt and I) further developed a population estimate for each individual household over time by correlating the total floor-area of a structure with its residential capacity (divided from the known total population counts of the island for the different mapped periods). I incorporated this numerical data into the mapped community distributions by creating color and size-coded histograms that represented the distribution of the population over the spatially defined community.
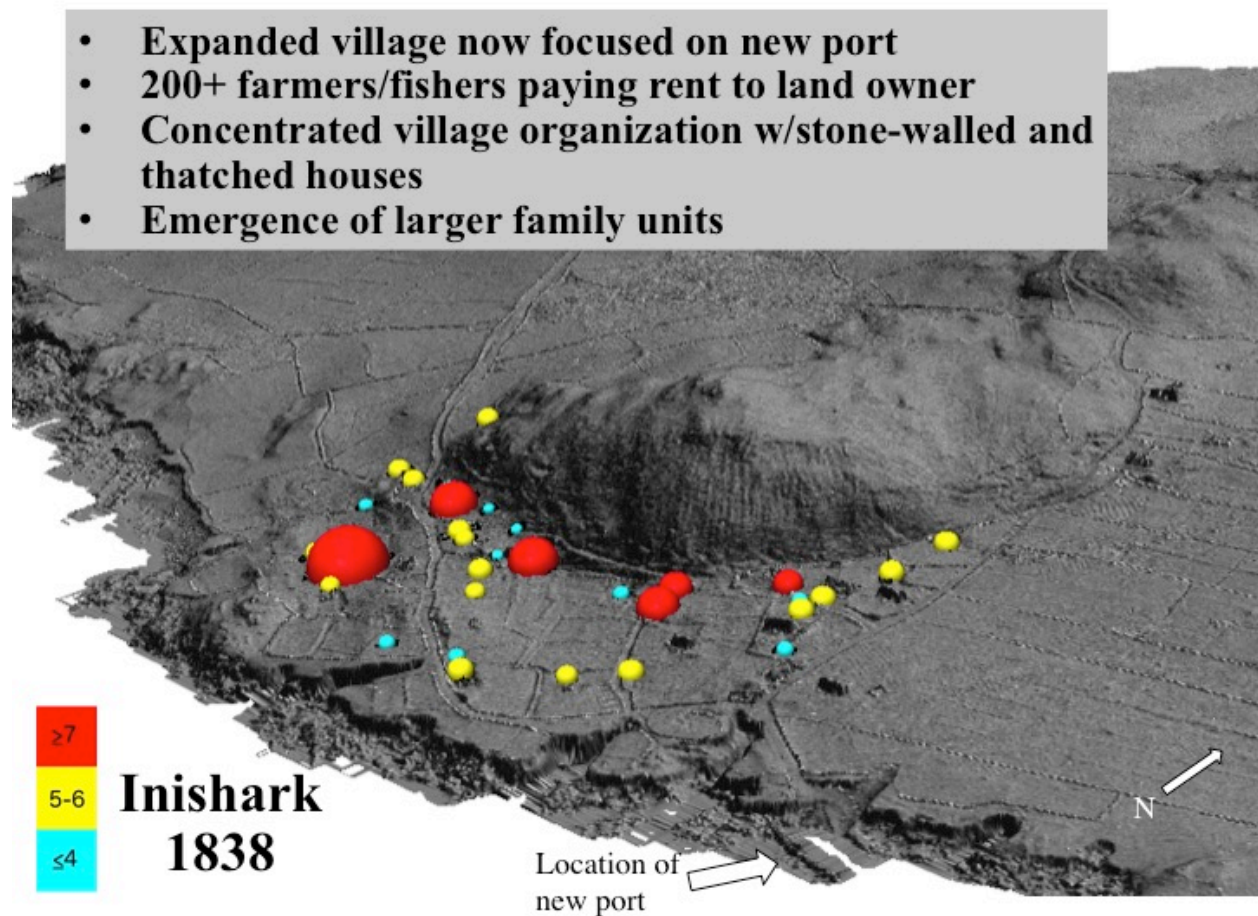
By referencing this visual distribution to the later community dynamics provided by the oral histories (and in relation to wider social influences such as a rise in nationalistic movements, the push for Irish independence, and gains in individual rights to property ownership occurring throughout these mapped 'slices' in time) I was able to represent the 'life-cycle' of the community, tracing its spatial characteristics from initial inception to final demise as the village responded to these external and internal social changes.

Beginning with the 1816 community, we see that the island village is relatively homogeneously distributed, both spatially as well as in the number of people per household (each ranging between 5 or 6 individuals, with a total island population of about 60). The houses are within close proximity to the island's 'old' port, the 'bread and butter' of the early community (Figure 2).

- Initial village founded post-1780's around old port
- 60 farmers/fishers paying rent to land owner
- Dispersed village organization w/ sod, stone and thatched houses

Inishark 1816
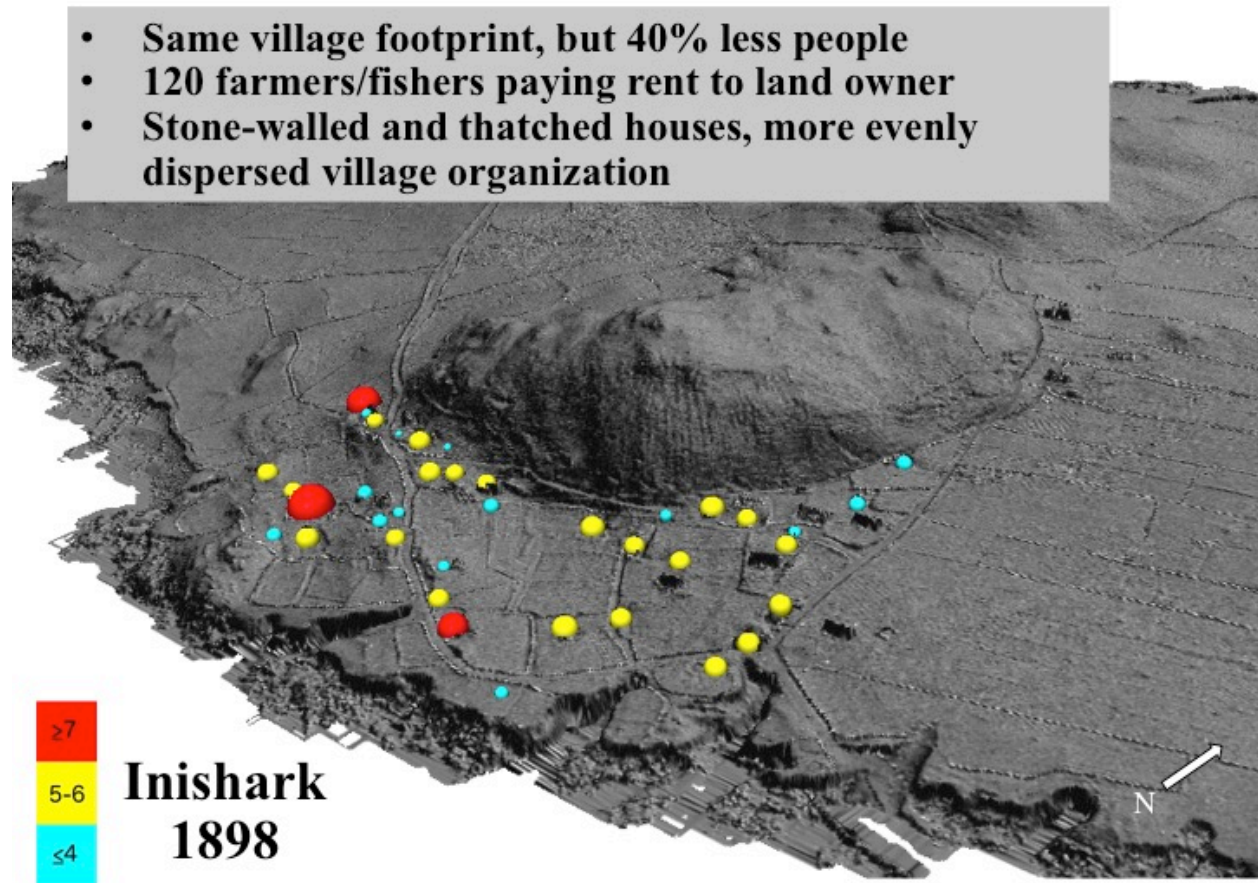
Location of old port

(Figure 2 – Distribution of the community at 1816 on Inishark, Ireland)

Just over two decades later, we see the community (at 1838) having 'spread out' considerably in order to accommodate the massive increase in total population (now over 200 individuals) and reorganize the general spatial positioning in response to the creation of a new port. The histograms also explicitly show that the inhabitants are no longer distributed evenly throughout the houses, but rather heavily clustered within particular dwellings. While it is unknown whether all individuals belong to the same family, or whether multiple families are residing within a single structure, we can get a sense of the degrees of 'influence' some groups likely had in island affairs in relation to their less-fecund neighbors (Figure 3).

> • **Expanded village now focused on new port**
> • **200+ farmers/fishers paying rent to land owner**
> • **Concentrated village organization w/stone-walled and thatched houses**
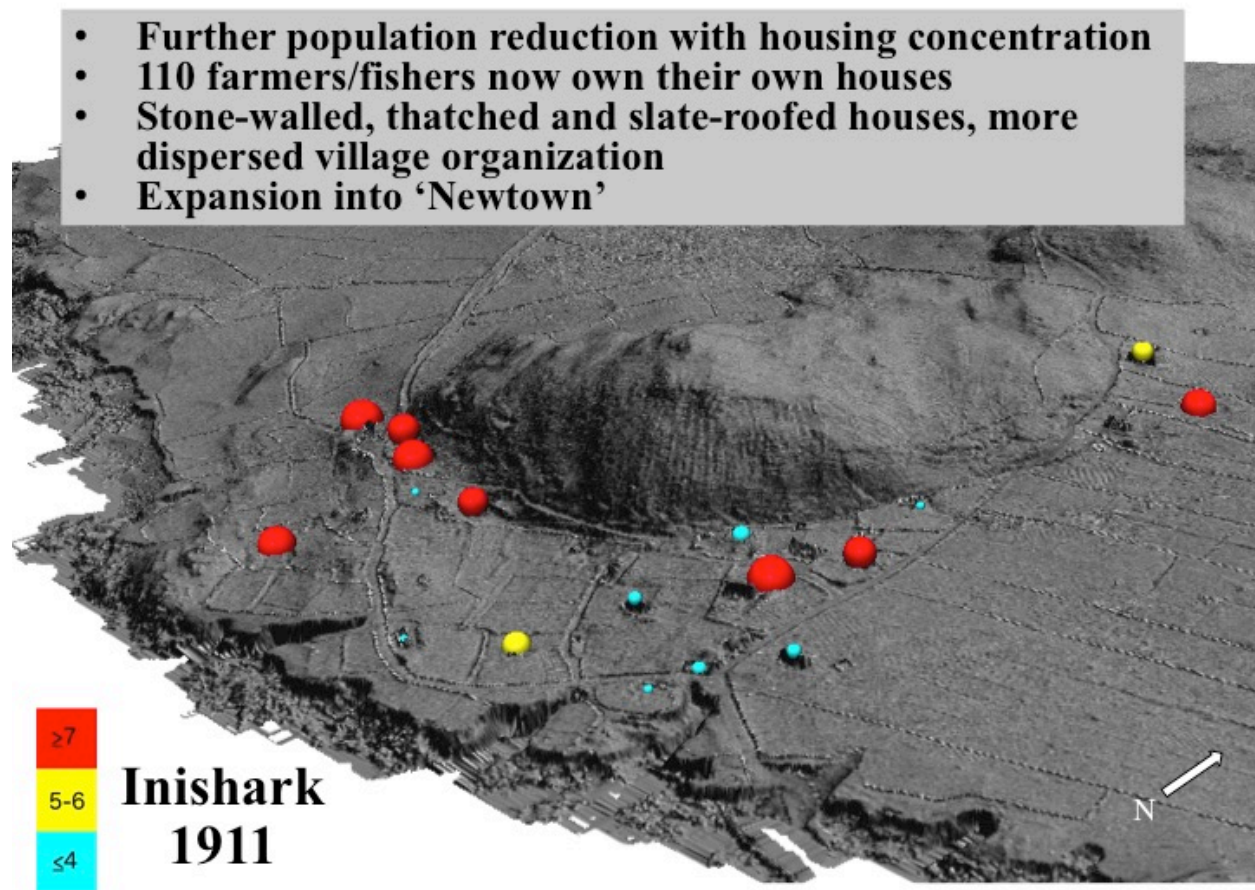> • **Emergence of larger family units**

(Figure 3 - Distribution of the community at 1838 on Inishark, Ireland)

With the 1898 iteration of the community we have a roughly 40% decline in the former total population, but interestingly more houses being occupied overall. Correspondingly, we see the dissemination of the community into houses with generally fewer occupants, but with a few exceptions (Figure 4).

- Same village footprint, but 40% less people
- 120 farmers/fishers paying rent to land owner
- Stone-walled and thatched houses, more evenly dispersed village organization
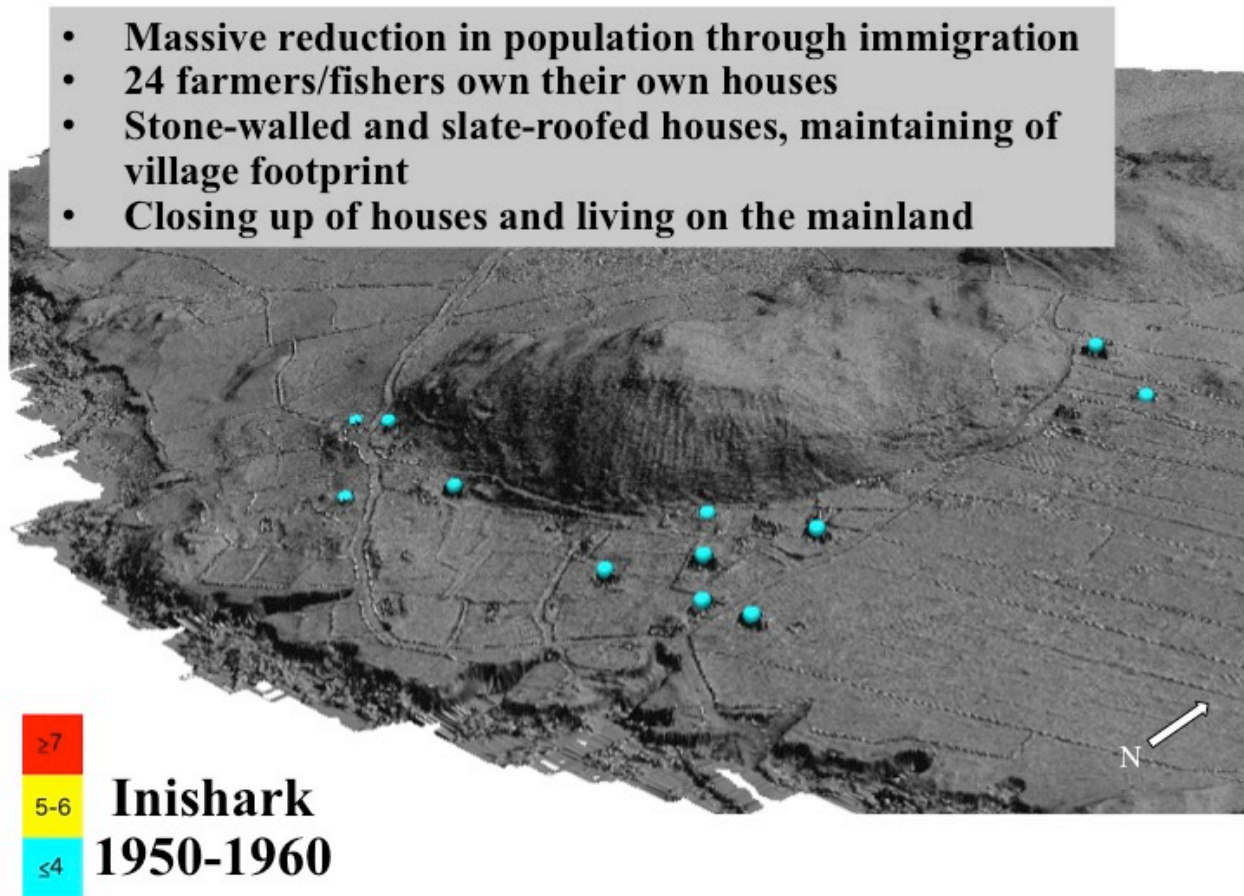
≥7
5-6
≤4

Inishark
1898

(Figure 4 - Distribution of the community at 1898 on Inishark, Ireland)

In 1911, this population has continued to reduce, but we again get a return to heavy clustering of peoples into a few houses. When putting this distributive change into the broader social context, it is likely that people have responded to a change in political laws which now enabled them to purchase their homes and surrounding land (which they were only renting before). This new purchasing power enabled people to expand beyond the original village boundaries, creating "Newtown", above the existing community. The return to densely populated households is likely the result of needing 'spare hands' available in order to work the newly acquired land (Figure 5).

- Further population reduction with housing concentration
- 110 farmers/fishers now own their own houses
- Stone-walled, thatched and slate-roofed houses, more dispersed village organization
- Expansion into 'Newtown'

≥7
5-6
≤4

Inishark
1911

N

(Figure 5 - Distribution of the community at 1911 on Inishark, Ireland)

The final community make-up mapped was the population distribution at the time of the island's abandonment in 1960. Here, we see only 24 people still residing on the island (with 4 or less individuals per household), while still maintaining the extent of the community "footprint" that had been established over 100 years prior (Figure 6).

- **Massive reduction in population through immigration**
- **24 farmers/fishers own their own houses**
- **Stone-walled and slate-roofed houses, maintaining of village footprint**
- **Closing up of houses and living on the mainland**

Inishark
1950-1960

(Figure 6 - Distribution of the community at 1960 on Inishark, Ireland)

Diving a bit further into the nuances of community dynamism, I utilized the census data from 1911 to 'map-out' the family connections within the community. Linking this with the histograms of number of residents per house, I was able to demonstrate another dimension of community dynamics based on the number of related individuals in the community and where they were located on the island. Interestingly, the Cloonan family, despite living in only 5 of the 17 houses occupied during this period, had the largest number of relatives within the community, with all but one of the houses occupied by more that 7 individuals. Alternately, while the Lacey family also occupied 5 houses, all but one of these had 4 or fewer residents. Lastly, the Murray family, while only residing in 3 houses, had the numerical equivalent, or perhaps even more, individuals living on the island that the 5-house Laceys, as two of the Murray homes had 7 or more individuals residing (Figure 7).
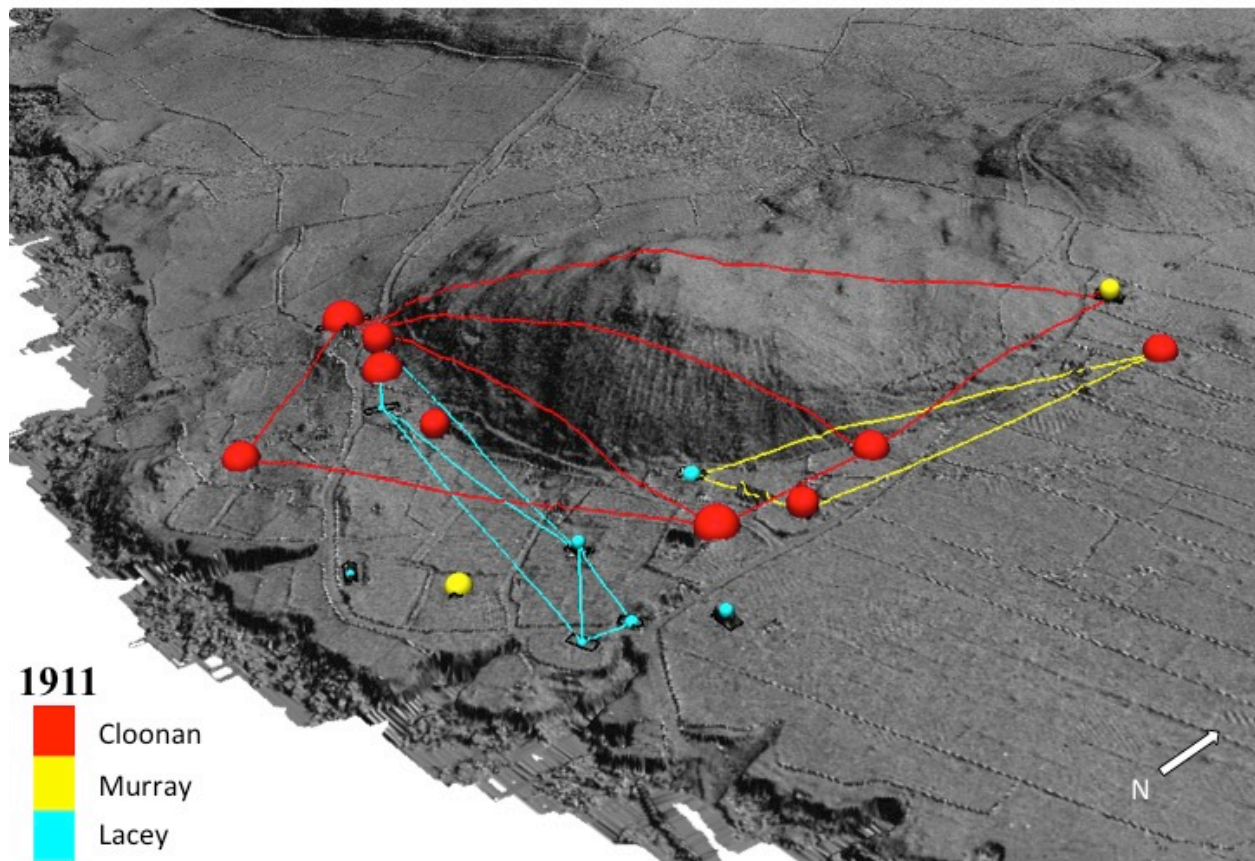
(Figure 7 – Family connections in the 1911 community. The colored lines correspond to the different families, while the colored histograms [balls] correspond to the number of individuals in each house, as defined in the other mapsets.)

With these examples, we can see that neither total number of people per house, nor family name associated with the house, alone address the complex dynamism frequently found within a community.

In this preliminary experiment in rethinking how we might visualize the shifting influences structuring experienced community over time, I have begun to explore how we might represent the interconnected nature of social 'scale'. The community is enacted at many different levels of perspective and experience. As a researcher, we often only see the community as a homogenous whole, using the broad numbers of total population-count or simple spatial distribution of households within the landscape, to inform us on superficial aspects of social life. This project works to bridge this large-scale means of perceiving community with a much more nuanced representation of the multifarious facets that comprise community structure at a 'mid-level' perspective. From this 'half-way' point between course-grained overviews and 'ultra-fine' ethnographies, I find we are in an optimal position to understand nuanced dimensions impacting social layout, (presumed) familial alliance, and demographic distributions that contribute to changing the community experienced by different generations of island inhabitants.

With the generous funding of the Nanovic Institute of European Studies, I had the opportunity to present this preliminary analysis at the national archaeological conference put on by the Society for Historical Archaeology (SHA) in Washington, D.C. Presenting this research to a professional audience was both exhilarating and terrifying, with the standard doubts plaguing my thoughts as to the possible reception of my ideas as the presentation grew nearer. But with the constructive guidance of my advisor Dr. Ian Kuijt to "just tell a story of the people and their place," I found myself standing in front of a crowded room conveying a narrative of people's experience of place-ness, and the importance of dynamism in characterizing community life, with this example of rural Ireland as a simple case study into the possibilities this approach affords. The talk was received well, and left me inspired to continue this pursuit of visualizing complexity through innovative means.