



COMMUNICATING SCIENCE ACROSS CULTURES, COMMENTARIES FROM SESSIONS
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Engaging Caribbean island communities with indigenous heritage and archaeology research

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Abstract

This paper describes community engagement activities with indigenous heritage and archaeology research in the Caribbean. The practice of local community engagement with the archaeological research process and results can contribute to retelling the indigenous history of the Caribbean in a more nuanced manner, and to dispel the documentary biases that originated and were perpetuated from colonial times. From the conception of the ERC-Synergy NEXUS 1492 research project, a key aim has been to engage local communities and partners in the research process and collaboratively explore how the research results can be positively incorporated in contemporary cultural heritage. In the context of community engagement with scientific research, this paper explores the question of who represents a community and highlights key examples in community participation in archaeological research. These examples emphasize participation throughout the research process, from the development of research questions, to data analysis, dissemination and conservation action.

Keywords

Community action; Public engagement with science and technology; Social inclusion

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Introduction

This paper describes community engagement activities with indigenous heritage and archaeology research in the Caribbean. These activities are conducted in the context of ERC-Synergy NEXUS 1492 (hereafter, NEXUS 1492), an archaeology and heritage research project focused on the period around the colonial invasions in the Caribbean. The first indigenous peoples of the Caribbean moved from South and Central America into the islands 8000 years ago. Thereafter, the archipelago was populated by diverse peoples connected by complex social networks, travel, migration and exchange [Hofman and Hoogland, 2016]. When Christopher Columbus landed in the Bahamas in 1492, a brutal history of colonisation was initiated. The indigenous societies were dramatically uprooted, their peoples enslaved and exposed to war, disease and involuntary massive relocation [Hofman

et al., 2018]. The stories told today of the indigenous Caribbean peoples originated in the chronicles of the European colonizers. Thus, a one-sided perspective, neglecting the indigenous and local experiences, has been consistently imposed [Ulloa Hung and Rojas Valcárcel, 2016].

The research project NEXUS 1492 contributes to rewriting the Caribbean indigenous and colonial history from the perspective of the Caribbean populations at the time, and investigates the impact of these events on Caribbean society today. The transdisciplinary research addresses these issues through archaeology, archaeometry, geochemistry, network analysis and heritage research, conducted in collaboration between researchers from the Caribbean region, international researchers and local and indigenous communities. From the conception of the project in 2012, a key aim has been to engage local communities and partners in the research process and to collaboratively explore how the research results can be positively incorporated in contemporary cultural heritage across the region. This is urgently required, as Caribbean indigenous histories are threatened across the region by both human-made and natural factors [Hofman and Hoogland, 2016]. Climate change, the recent hurricanes that ravaged the Caribbean (such as hurricanes Irma and Maria in 2017) and other natural catastrophes threaten key archaeological sites on Caribbean shores. Human-made factors such as looting and illegal trade, growth in tourism, sand mining, large-scale construction, inadequate heritage legislation, and insufficient engagement with local communities exacerbate this, as has been highlighted by Hofman and Hoogland [2016]. Brighton Beach in St. Vincent is an important archaeological site of a village that was



Figure 1. Eroding coast at a beach in St. Vincent in March 2018 reveals hundreds of indigenous artefacts at risk of being washed away by the sea. Photo: Tibisay Sankatsing Nava.

inhabited for hundreds of years. Illegal sand mining accelerated the process of erosion of this as shown in Figure 1, below.

To support local communities to address these challenges, NEXUS 1492 and its local partners to engage the public with archaeology and heritage using the latest research results. The project has published educational materials on archaeology, heritage and sea travel [Con Aguilar, Slayton and Hofman, 2018; Con Aguilar et al., 2017], developed crowdsourcing platforms with local communities in St. Kitts and Dominican Republic [van der Linde and Mans, 2015] and created a documentary trailer that has been featured in the 'Taíno: Native Heritage and Identity in the Caribbean' exhibition at the Smithsonian's National Museum of the American Indian [NEXUS 1492, 2018]. The NEXUS 1492 research results emphasize the importance of archaeological and heritage knowledge and highlight the continuity of indigenous heritage in the Caribbean [Hofman et al., 2018]. Many contemporary agricultural, culinary and material culture practices as well as oral histories retain strong indigenous aspects, despite a lack of local awareness of the origin of these practices. For example, agriculture across the Caribbean today uses traditional indigenous slash and burn techniques [Hofman et al., 2018; Pesoutova and Hofman, 2016]. By focusing on both the transformations and the continuity of indigenous aspects in Caribbean culture today, the indigenous past and its relationship with present-day indigenous peoples can be incorporated in the Caribbean cultural memory.

Community representatives in a plural community

As we aim to engage our audiences with science, whether it is a local community or any other group, we are faced with a challenge: communities are not homogenous, and consist of a diversity of actors and agents with different agendas. The concept of 'community' is complex, and not easy to define, both theoretically and in practical terms [Karp, 1991]. The multicultural nature of the region makes this concept particularly interesting for the Caribbean. As Alissandra Cummins explains: "Culturally diverse, the region shares a common pre- and post-colonization history, though nuanced by the peculiar local histories and geographies of the individual countries" [Farmer and Russell, 2013, p. 7]. Even in a culturally diverse environment like the Caribbean, community engagement is a common practice that is implemented in diverse ways, as has been demonstrated in the case of Caribbean museums [Ariese-Vandemeulebroucke, 2018].

Individuals are usually part of multiple communities: landowners who find archaeological sites, archaeologists who identify as indigenous, or local community members who become archaeology students all cross imagined 'communities', and can have a major impact on the research process. As Tilley describes: 'We do not view the concept of "community" as a bounded, self-contained entity, but rather as a mosaic of interacting and continually evolving social and ethnic structures' [Tilley, 2006]. If we follow this definition, we can ask: who speaks for and represents the community in our projects? When looking for community actors to serve as representatives, the diversity within a community can pose a challenge. Individuals representing a community play a key role in a project's success. In some cases, the choice of an individual has the capacity to facilitate engagement such that it results in higher than expected engagement, or obstruct it, resulting in no engagement at all.

In the work of NEXUS 1492, building mutual trust with different groups or individuals within a community has been vital in allowing progress. Years of collaboration have established relationships which benefit both parties. To illustrate: former indigenous Kalinago Chief and long-time NEXUS 1492 collaborator from the island of Dominica, Irvince Auguiste, contributed his expertise to the analysis of archaeological data of the indigenous settlement sites found at Argyle, St. Vincent and El Flaco, Dominican Republic. Regarding the benefit for local community members, Irvince Auguiste said of his experience: *“I am proud to be Kalinago. It’s awesome to be part of the ongoing history of the indigenous peoples of the Caribbean. The NEXUS program has been extremely useful to me. It gave me the opportunity to participate practically in archaeological research, and to better understand the ties of the pre-Columbian Caribbean civilization”*. From the perspective of researchers, these collaborations are built on mutual benefit and trust enriching the research process and results, and have a positive effect on the quality of research questions, the type of data gathered, the interpretation of this data and the broader impact that the research results have on local, regional and international levels.

Community engagement throughout the scientific research process

The research project NEXUS1492 implements community engagement as a core aspect of scientific research. Community engagement, and other forms of stakeholder engagement can “reduce conflict, build trust, and facilitate learning among stakeholders and publics, who are then more likely to support project goals and implement decisions in the long term” [Reed et al., 2018]. The outcomes of engagement or public participation in scientific research projects can be divided in three categories: “outcomes for research (e.g., scientific findings); outcomes for individual participants (e.g., acquiring new skills or knowledge); and/or outcomes for social-ecological systems (e.g., influencing policies, building community capacity for decision making, taking conservation action)” [Shirk et al., 2012]. Specific benefits for societal actors include education and skills development, opportunity to contribute, and results in research that has a better capacity to meet societal needs [Datta, 2011]. In NEXUS 1492, local researchers and community members have been involved throughout the research process: in the research design, data collection, data analysis, dissemination and subsequent actions, including public engagement.

Community participation in research design, data collection and analysis

In the process of research design, several research questions of NEXUS 1492 were written in collaboration with local researchers and local community members. In the work of Stancioff [2018], for example, the indigenous community of the Kalinago in Dominica expressed an interest in and concern with local landscape changes. The researchers worked closely with the Department of Agriculture, Ministry of Kalinago Affairs and members of the Kalinago Council. This collaboration guided the focus and research questions in this project. Together, they created a GIS database of the Kalinago Territory that includes community and environmental data, which was merged with national data and stored at the Kalinago Council, as well as with regional and national government.

In the 6 years of the project, local community members participated in field work excavations and field schools with archaeology students across the region. Community members from La Poterie, Grenada, contributed to archaeological data

collection during excavations in their village in 2016 and 2017. This form of community participation in research, where communities participate in excavation and data collection, is not uncommon, especially in the context of ‘public archaeology’ [Okamura and Matsuda, 2011]. Participation in both collection and interpretation of data, however, is considered a higher degree of community participation in science [Shirk et al., 2012]. Within NEXUS 1492, Irvince Auguiste contributed to the interpretation of posthole features of the archaeological site of El Flaco (Figure 2). In a similar manner, Sardo Sutherland shares his knowledge of local clay and clay sources on the island of St. Vincent (Figure 3). These are used for analysis and comparison to pre-colonial clay samples, in a collaboration that spans decades.

Community participation in dissemination and subsequent actions, including public engagement

Local stakeholders and community members are involved in the dissemination of research results, through academic presentations at conferences and seminars [NEXUS 1492, 2016, in Leiden; NEXUS 1492, 2018, in Dominica] and subsequent actions, such as public engagement. Two key examples of this are the co-creation of educational materials with Caribbean teachers [Con Aguilar, Slayton and Hofman, 2018], and the development of a collaborative, Pan-Caribbean exhibition *Caribbean Ties* that will be presented in 15 countries in the Caribbean and Europe in 2019. Through these collaborative actions throughout the research process, the project engages Caribbean societies by locally-led public engagement projects, to stimulate a sense of ownership and ensure a sustainable future for Caribbean heritage on a local, regional and global scale.



Figure 2. Former Kalinago Chief Irvince Auguiste (Kalinago Territory, Dominica) analyses the structure of post holes with Corinne Hofman (Leiden University, the Netherlands) at the archaeological site in Argyle, St. Vincent. Photo: Menno Hoogland.



Figure 3. Sardo Sutherland from St. Vincent, identifies and collects local clay for comparison with indigenous pre-colonial pottery in Sandy Bay, St. Vincent. Photo: Patrick Degryse.

Reconstruction of indigenous village using archaeological data

In 2010, the remnants of a 16th century indigenous village were found on the island of St. Vincent, on the construction terrain of the new international airport. The site, excavated in a collaborative rescue project, revealed floor plans of at least eleven indigenous houses [Hofman and Hoogland, 2012]. Because of the involvement and lobbying of the local community, the government of St. Vincent decided to reconstruct these indigenous houses in collaboration with NEXUS 1492. Choices made regarding type of wood and choice of binding and roofing material were decided in discussion with the local experts and descendants of the indigenous communities from Saint Vincent and nearby islands (Figure 4). The research team collaborated with these groups on the experimental construction of the first indigenous house [Hofman and Hoogland, 2012; Hofman et al., 2018]. Later in 2016, additional houses were completed independently. The village has been declared a National Heritage Site and plans for a tourism and culture centre are being developed by the Ministry of Tourism. This project is an excellent example of a successful research and public engagement project leading to the preservation of archaeological heritage that would not have been possible without extensive involvement of the local community throughout the research process [Hofman and Hoogland, 2012; Hofman et al., 2018].

Discussion & conclusion

The examples discussed in this paper illustrate the efforts of NEXUS 1492 and partners to positively incorporate indigenous past in Caribbean society through community participation in scientific research, education and public engagement. In this process, engaging in a long-term commitment to build trust through



Figure 4. Construction of an indigenous house on the archaeological site of Argyle with members of the Garifuna community from Greiggs. Cayo village, Argyle, St. Vincent. Photo: Menno Hoogland.

partnerships of mutual benefit is key, as communities are not homogenous, and the individuals engaged as representatives of a community can make or break a community participation project. NEXUS 1492 has implemented community engagement throughout the research process: design, data collection, analysis, dissemination and action. Community members collaborated in the research process by identifying relevant questions, participating in excavation and data collection, interpreting excavation data, presenting research results, developing educational material and engaging in conservation efforts to preserve indigenous heritage. Future plans aim to develop community participation further, initially focusing on the collaboration in the development of research questions. To this end, an academic workshop is organized in January 2019, in which representatives of indigenous communities are invited to participate, present and contribute to the development of research ideas. In addition, the *Caribbean Ties* exhibition will include a community participation component, where the exhibition audiences are invited to contribute their ideas for future research questions. In the context of Caribbean archaeology and heritage research, these practices of local community engagement with the archaeological research process and results can contribute to retelling the indigenous history of the Caribbean in a more nuanced manner, and to dispel the documentary biases that originated and were perpetuated from colonial times.

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