## The Antiquity of Jaffna Fort: new evidence from post-disaster archaeological investigations in Northern Sri Lanka

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Post-disaster archaeological investigations at Jaffna Fort have revealed material demonstrating pre-colonial contact, shedding new light on the importance of the site in Indian Ocean trade and communications networks before European occupation.

The Dutch East India Company besieged the Portuguese fort at Jaffna in March 1658. With Terms of Surrender agreed on 22<sup>nd</sup> June 1658, they encountered a site "battered to pieces" (Baldaeus 1703: 798) and proceeded to level or remodel damaged structures. The outer works were completed in 1792, transforming the site from a quadrangle to a pentagonal fortification (Figure 1), but the poorly provisioned Dutch garrison surrendered to British forces three years later without firing a shot (Nelson 1984: 82-83). More recently, Jaffna Fort was a strategic and symbolic focus during the conflict between the Sri Lankan Government and the Liberation Tigers of Tamil Eelam— a humanitarian catastrophe that also destroyed cultural heritage.

This heritage is now a focus for efforts to address reconciliation, renewal and peacebuilding through tourism and its associated economic impacts (Pushparatnam 2014). Conservation todate has concentrated on colonial-era structures (Mudiyanselage 2011). Recent discoveries uncovered during the construction of new visitor infrastructure however, including Rouletted Ware (c.200 BC - 200 AD) (Tomber 2000; Ford et al. 2005) and ceramics from East and West Asia (Pushparatnam 2015: 88-90), point to both the presence of vulnerable earlier subsurface heritage and the site's potential time-depth and place in island-wide (Ragupathy 1987; Weisshaar et al. 2001; Coningham 2006; Carswell et al. 2013) and Indian Ocean exchange networks (Begley 1996; Rajan and Rama 1994).

The 'Jaffna Fort Post-Disaster Archaeological Research Project' responded to this context in 2017 by beginning to map, identify and characterise its cultural sequences through excavation, Unmanned Aerial Vehicle (UAV) and Ground Penetrating Radar (GPR) surveys (Figure 2). Transposing methodologies for post-disaster heritage co-designed in post-

earthquake Nepal (Coningham et al. 2018) (Figure 3), the team aimed to protect archaeologically sensitive areas as well as refine typologies from Jaffna's first scientifically-dated sequences.

GPR survey identified rectilinear anomalies below the Parade Ground (Figure 4), which may represent structures from the Portuguese Fort, including the church, 'Our Lady of Miracles', which was cleared by the Dutch. Although monuments from earlier periods were destroyed, there is a history of reincorporation with earlier tombstones and bells reinterred inside the Dutch-era Kruys Kerk and pre-colonial carved granite blocks within rubble at the site, probably recycled from Hindu temples demolished by the Portuguese (Pushparatnam 2015: 96-98).

Pre-colonial contact materials were successfully recovered, particularly from excavations close to a new septic tank (Figure 5). Black and Red Ware, Dusun Jars, early Islamic glazed wares, Rouletted Ware and Ming porcelain were excavated from contexts without Europeancontact artefacts, confirming the pre-colonial significance of Jaffna Fort. Importantly, new ceramic types were identified, including sherds exhibiting rouletting and stamped radial designs, illustrating both Jaffna's uniqueness and central place within international Indian Ocean networks (Figure 6). Unfortunately, these finds were from within mixed deposits above the natural bedrock. While we await scientific dating confirmation, the terminus ante quem for the earliest phases is estimated to be the seventh or eighth century AD, although many individual items date to the first millennium BC.

Further HEFCE-GCRF sponsored excavations will investigate the GPR anomalies potentially representing Portuguese-era monuments and continue to seek secure stratigraphic sequences to provide robust scientifically dated evidence for the origins of Jaffna and its role within the development of international trade and communication networks before and beyond European contact.

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## References

Baldaeus, P. 1703. *Description of the Great and Most Famous Isle of Ceylon*. London: Awnsham and John Churchill.

Begley, V. 1996. *The Ancient Port of Arikamedu: New Excavations and Researches 1989-*1992. Paris: Ecole Francais D'Extreme-Orient.

Carswell, J.S.U, Deraniyagala, S.U. and Graham, A. 2013. *Mantai: City by the Sea*. Aichwald: Linden Soft.

Coningham, R.A.E. 2006. Anuradhapura: Volume 2: the Artefacts. Oxford: Archaeopress.

Coningham, R.A.E., Acharya, K.P., Davis, C.E., Weise, K., Kunwar, R.B. and Simpson, I.A. 2018. Look Down, Not Up: Protecting the Post-disaster Subsurface Heritage of the Kathmandu Valley's UNESCO World Heritage Site. In Bracken, L.A., Ruszczyk, H. and Robinson, T. (eds.) *Evolving Narratives of Hazard and Risk: The Gorkha Earthquake, Nepal, 2015*: 159-181. Cham: Palgrave Macmillan.

Ford, L.A., Pollard, A.M., Coningham, R.A.E., and Stern, B. 2005. A geochemical investigation of the origin of Rouletted and other related South Asian fine wares. *Antiquity* 79: 909-920.

Mudiyanselage, S.R.P.D. 2011. Sri Lankan archaeological heritage damaged by war: The restoration of the Dutch Fort of Jaffna. In Lambert, S. and Rockwell, C. (eds.) *Protecting Cultural Heritage in Times of Conflict: Contributions from the participants of the international course on First Aid to Cultural Heritage in Times of Conflict:* 72-76. Rome: ICCROM.

Nelson, W.A. 1984. The Dutch Forts of Sri Lanka. Edinburgh: Canongate.

Pushparatnam, P. 2014. *Tourism and Monuments: of Archaeological Heritage in Northern Sri Lanka*. Jaffna: P. Pushparatnam.

Pushparatnam, P. 2015. Nallur Kingdom and Jaffna Fort - A Review. *The Sri Lankan Journal of South Asian Studies*. Volume 1(1): 81-102.

Ragupathy, P. 1987. Early Settlements in Jaffna: An Archaeological Survey. Madras: Ragupathy.

Rajan, K.V. and Raman, K., 1994. *Kaveripattinam excavations*, 1963-73. New Delhi: Archaeological Survey of India, Govt. of India.

Weisshaar, H.-J., Roth, H. and Wijeyapala, W. 2001. Ancient Ruhuna: Sri Lankan-German archaeological project in the Southern Province. Mainz: Verlag Philipp Von Zabern.

Tomber, R. 2000. Indo-Roman trade: the ceramic evidence from Egypt. *Antiquity* 74: 624-631.

## Figures

Figure 1: UAV image of Jaffna Fort, looking west.

Figure 2: Professor Pushparatnam, Director, CCF Jaffna and Professor Gunawardhana, Director-General CCF, with participants from the University of Jaffna and CCF at the start of the 2017 field season.

Figure 3: Post-disaster excavations at the Kruys Kerk.

Figure 4: UAV map of Jaffna Fort (processed with Pix4Dmapper software) with GPR survey results at a depth of 0.8 metres.

Figure 5: Excavations near the new toilet block and septic tank.

Figure 6: Artefacts from the 2017 excavations.