

Pattern Recognition is a media-art project collaboration between artists Vicki Smith (Harihari / S.V. Kiritea) and Aroha Timoti-Coxon (Hokitika, Ngai Tahu) funded by the Intercreate Research Centre<sup>1</sup>. The Pattern Recognition project proposes, through the woven art of tukutuku, to create a panel that is a QR<sup>2</sup> code to be installed in the Westland District library in Hokitika. The project references the process of creating Tukutuku as a conversation between two weavers who pass the ara (thread) backwards and forwards in order to construct the work. It describes the codification of information held by a QR pattern as similar to the codification of stories told through the patterns of tukutuku and in its placement in the library also highlights the link the library has to the world wide web as the biggest repository of 'woven information' [Tukutuku-Ao-Whanui].

## Background

The two artists first met when Vicki attended one of Aroha's Raraka Wanaka (weaving workshops) in 2008, since then they have worked together on weaving/art projects. In 2009 with the six primary schools in South Westland and which included taking the year 7&8 cohort of students to Tauraka Waka a Māui Marae. http://tinyurl.com/rarakawanaka.

From the marae visit the seeds were sown for the Haka Story project (2011) including local iwi, teachers and students from South Westland Area School, Whataroa Primary, and Nelson College (http://www.edgazette.govt.nz/Articles/Article.aspx?ArticleId=8442).

## What is it?

Pattern Recognition is a work that combines the kaupapa of tukutuku with that of the QR code. They both are patterns that tell stories that can be 'decoded' by those who are able to appreciate them. Tukutuku in creation is a conversation and the finished product holds coded information in the form of patterns that are recognisable motifs telling stories for those who understand what they represent.

http://www.intercreate.org/

<sup>&</sup>lt;sup>2</sup> QR or Quick Response code is a 2D Barcode for

A QR code is a type of 2D bar code used to provide access to information through an internet enabled mobile phone or tablet device (a reader is required to decode them). QR codes can open files or perform an action such as lead to a website.

The final result will be assembled to represent tukutuku in the usual manner of their construction but to be accessible in the same way QR codes are (through scanning software). Pattern Recognition seeks to realise an aspect of the conversation around traditional craft practices that include within them the space for discussion, idea generation and collective knowledge making through the shared process of construction. The digital world is made up of the on/off binary code as is weaving, Pattern Recognition references this and the world wide web as the biggest repository of 'woven information' [Tukutuku-Ao-Whanui].

To tell an important story of the area the work will point to and hang in the Westland District Library which is a hub of communities in the local Hokitika region but also an important service to the remote rural communities of South Westland. http://westlib.co.nz/



## Timeline:

Construction and testing of the first prototype of the work was undertaken from the 25-28th of August. The creation of the weaving was tested by creating a base for the panel of bamboo stakes lashed to a frame. For the thread the artists tested;

- fish packing strapping ~ in order to create solid squares a wrapping method was tried but proved difficult to secure.
- plain harakeke ~ great hold and easy to secure but a contrast is required so we went for,
- dyed harakeke ~ once processed we died the harakeke black and to ensure the pattern conformed to printed dimensions we began with the 'non-negotiables' in terms of the code

The outcome, while visually conforming to the desired pattern had inherent flaws due to the fact that the bamboo moved during construction process, affecting the spacing. The bamboo although as uniform as possible was not even enough to ensure consistent spacing in the final outcome. We suspect also the contrast is also not sufficient (the camera tries but fails to register the code).

The learning through this process is starting with as many parameters set before the weaving begins in order to allow the acceptable variation be confined to the ara (thread). The artists are confident they have worked out a method of production determined to ensure a working finished product. in a manner that will be able to be read by mobile devices. They will also incorporate some more traditional patterns bordering the QR code.

As Aroha said "although weaving is a binary process of under and over to make this pattern work we have to look at the work digitally also and see the code in the pattern the camera is trying to recognise"

The next stage will take place in early October with the construction being documented and shared with local media, along with the presentation of the finished work to the library.





The final weaving is to be constructed from material sourced locally and recycled where possible. The artists will talk with local arts teacher and their students about the process and ideas behind it.

## **Further Details**

Local artist, photographer Kath Lane (Harihari) will do the documentation of the artists constructing and presenting the final work.

The tukutuku frame will be constructed from timber salvaged from cyclone Ita as well as half round dowels to ensure a uniform platform to begin the weaving and to ensure a working result.