The Wyvern Sample from the project, *The Enchantment of Cloth*

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The mythical wyvern image comes from a Byzantine textile "The Branco Belt" (c. 1350) which was observed in the collection of the British Museum in April 2015. The original Branco Belt was made by laying *or couching* silver threads by hand. The belt was worn by a Serbian aristocrat in Constantinople (now Istanbul).

This sample is a test, to be configured as an antenna on a dress in a project entitled *The Enchantment of Cloth*, by Barbara Layne and Janis Jefferies. Our wyvern "patch antenna" will connect to a panther antenna (also from the Branco belt) on a jacket worn by another person. When the people face each other and the signal (the connection) is strong, the LEDs stitched onto the garment will light up.

This project uses the recently acquired Tajima Laying Machine, which embeds conductive metal threads onto a textile substrate according to a computerized design. The design was initially photographed at the museum, then put into a vector based software and assigned laying stitches. The machine couches the silver threads and stitches the colored embroidery threads that better define the wyvern. The antenna patch will be connected to other electronic components and LEDs in the dress

The research hopes to reinvigorate some of the wealth of textiles in the archives of museum by studying and reworking historic techniques and imagery. We will look at the social implications and privilege of wearing precious metal threads in the past and how wearable technologies can indicate status while facilitating social connections in real time. The project will be completed in 2017.

The Tajima Laying Machine, Studio subTela at Concordia University, Montreal