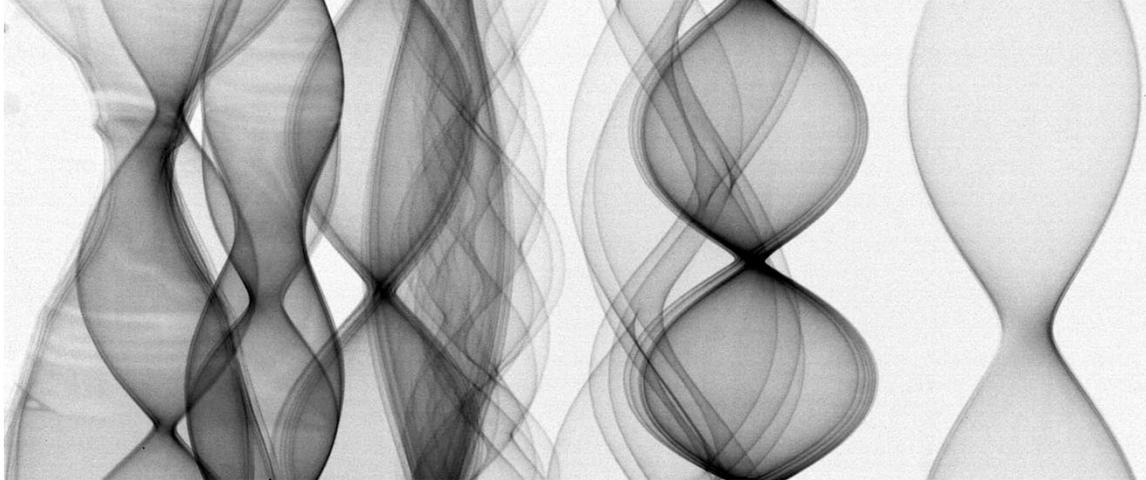


Harrop Studio: Resonance and Modulation

On a seemingly normal spring morning in 1888 there were reports of an earthquake somewhere in the lower east side of Manhattan. A subtle, but certain, vibration of increasing intensity sent a local high-rise building site into pandemonium. By all accounts, machinery and equipment were tossed, while iron-workers were sent scurrying into the street. Police were eventually able to locate the epicenter of this earthquake to an innocuous laboratory at 48^E Houston st. in the lower East Side. This was, of course, the laboratory of the famed scientist Nicolas Tesla. The cause of this disruption was a due to a small mechanical oscillating or vibration device (later to be known as Tesla's earthquake machine) of his invention. Although later debunked by the "Mythbusters", it is a convenient demonstration of the possibilities of resonance.



vorticose: Harrop / Leckey 2011

This studio will be using the question of resonance as a template for experimentation, exploration, elaboration and execution in the context of a year-long comprehensive architectural project. While the term resonance seems to privilege the sonic (or in Tesla's case, the sub audible) it has relevance to any phenomenon that includes the dimension of temporality and oscillation. Resonant phenomenon can be found in clock mechanisms, tidal rhythms, astronomical geometry, molecular chemistry, radio frequencies and coherent light. Yet, in a broader, even more poetic dimension, we find resonance in literary thought, emotional affect (memory and history), and transindividual cultural movements.

While Tesla's experiment sought to find the resonant frequency of a large structure by modulating a mechanical device, we will be looking at exploring a diversity of resonances by modulating architecture through drawing, making, exploring materials, creating space, envelopes, structure, program, site and building systems. The focus of this studio is on making, drawing and comprehensive architecture. While it has a strong capacity and cultural reputation for electronic, interactive and sonic experimentation, it privileges the analogue over the digital, the passive over the electronic and the exploration of phenomenon using the mediums that the student feels comfortable with.

Berlin

Once again, this year's studio is planning a field / working trip to Berlin, Germany. The trip will be for students to develop their initial investigations but with a tangible site in an urban context. These sites that are to be investigated will become the project sites for the subsequent work of their design proposals during the remainder of the studio year. The studio will also involve a good number of studio visits to architectural and artistic practices based in Berlin. As well, there will be focused collaborations and workshops based on the content of this studio.

Any questions can be addressed to me: harropp@cc.umanitoba.ca. More information can be found @ dedale11.ocular-witness.com. For previous studio work, go to www.ocular-witness.com