Making still objects come alive is more than poetic metaphor at the MIT Tangible Media Group. They have a project called Transform that seeks to turn a static furnishing into a dynamic stream of motion through human interplay. Their motion design is inspired by dynamic interactions among wind, water and sand in nature. Their work was shown at the Lexus Design Amazing exhibition in Milan this month.

They showed their Transform project table, consisting of three shape displays, moving over 1,000 pins up and down in realtime. Based on their concept, the tabletop becomes a dynamic display enabled by the interplay of human with object. The kinetic energy of the viewers, captured by a sensor, drives wave motion represented by the dynamic pins. Reports on their exhibit noted that the MIT effort is more than a gee-whiz theatrical spectacle of a moving tabletop but rather an opportunity to look at a shape-shifting technology future, where furnishings can be transformed. The table is part of the team's efforts exploring interface design. Creators Sean Follmer, Daniel Leithinger, Amit Zoran, and Philipp Schoessler are overseen on this project by Professor Hiroshi Ishii at MIT's Tangible Media Group, of the MIT Media Lab. "In the future, computers aren't going to look like computers. They're going to be embedded in everything around us," Leithinger said, in a report in *Fast Company*.

With that kind of ambition, it is not surprising that Ishii is said to foster "a unique, antidisciplinary culture" among his team members at the Lab, going beyond disciplines to encourage the mixing and matching of seemingly disparate research areas. The group suggests a vision of Radical Atoms as a material that can be part of the future of human-material interaction, where all digital information has a physical manifestation so that we can interact directly with it. "We no longer think of designing the interface, but rather of the interface itself as material," says a project page. "We may call it 'Material User Interface (MUI)."

The statement goes on to say, "Even though we may need to wait decades before atom hackers (material scientists, self-organizing nano-robot engineers, etc.) can invent the enabling technologies for Radical Atoms, we believe the exploration of interaction design techniques can begin today."

More information: tangible.media.mit.edu/vision/tangible.media.mit.edu/project/transform/

© 2014 Phys.org