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Spice At A Distance

The domain of the kitchen is an exciting one, full of rich sensory information – smells, tastes, textures and sounds. It's the center of communication in the home – the phone is the appliance most used – and it's the center of the family, where the family meets to discuss and interact and eat together.

The technology necessary to digitally record the experience is smell is improving rapidly, with a great deal of research coming from the food sciences and other industries. The production of smells in any realistic way remains a far more difficult problem. Spice At A Distance is a very preliminary attempt at starting to introduce a method of communicating smells and thus sharing and communicating in a non-visual, non-audio manner.

We cannot currently reliably recreate the smells of a particular piece of meat cooking, or a particular roasting red pepper. But cooking does have the advantage of using a palette of smells and tastes in the forms of spices.

My spice rack at home has some forty spices, in transparent octagonal spice boxes located behind the stove. Cooking Indian food means garam masala and tumeric, Italian food means oregano and peppers, while baking gingerbread means the warm smells of cloves and nutmeg and ginger. By simply keeping track of which spices are being used, it's possible to build up an idea of the environment being created. We transmit the information along with other sensory information – the music being played, sound and video from the kitchen – to start to recreate connect spaces that may be emotionally close but physically distant.

We propose a digitally augmented spice rack that can both act as an input device and an output device. As an input device, it keeps track of which spices are being used, and transmits that information to the remote kitchen. As an output device, it gently releases the scent of the spice being used. Combined with existing technologies for transmitting video and audio, and possibly even prototype devices for transmitting touch, we can continue towards a goal of allowing emotional and social interaction, regardless of physical distance.

Incense? InSense? Netscents? SpiceWorld? WorldSpice? Smellorama! Smellagogo!