

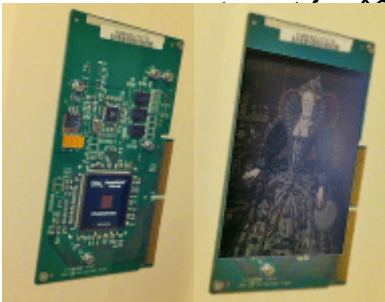


Obliquitous computing

Description

Augmented reality has gone mainstream, especially with the distribution and promotion of mobile phone apps such as [Aurasma](#). This handy software exploits the camera feature of your smartphone to superimpose images onto the everyday world of objects as seen on your mobile screen.

So with the camera active, I move my iPhone around the living room. When the lens alights on a view of my coffee table a map of the world dissolves into view, replacing the surface. I have pre-stored this image, and taught the phone to recognise the tabletop, irrespective of the angle at which I hold the camera. And as I move around the room, camera still pointing at the coffee table from different angles, the map sticks. Advertising posters, flat building facades, just about any distinctively patterned surface



hidden artworks.â•

This is easy-access augmented reality. Extremely fast image recognition

provides a means of depositing onto, and retrieving from, the environment static and moving images, sounds and other resources via mobile devices: the world seen through the screen of your smart phone.

What convinces us that we are looking at objects mapped onto the world of the everyday is the fact that these images shimmy over surfaces not only viewed straight on, orthogonally as it were, but observed at an arbitrary **oblique** angle.

Obliquity is a major feature of the current crop of high resolution, light, and robust interactive screens found on smartphones and tablet computers. These devices are designed to be positioned, held, viewed and touched from all angles, mostly obliquely.

Already there are major differences between the horizontal and vertical viewing of a flat surface. The vertical says "hands off" and requires effort to sustain physical contact. The horizontal says "touch me," "smear me with your fingers." The oblique invites casual encounter.

One of the earliest advocates of ubiquitous computing, Mark Weiser, imagined the casual, egalitarian office environment with people reclining on bean bag chairs and reaching for the nearest digital tablet. Obliquity is democratic.

Steven Connor's article "[Inclining to the view](#)" argues successfully for a reassessment of the importance of "diagonality" and the importance of "angular thinking." Think of the straight, orthogonal, laminar as the exotic, as a particular case of the angled and the deviant.

I eulogized about the angle, in the form of the wedge, in *The Tuning of Place*, in the context of mobile technologies. Angular wedges, obliquely surfaced fillers, are ubiquitous in construction, tools and machines, and their calibration, and provide a metaphor for the hack, the opportunistic fix, that characterises much design and invention.

It occurs to me that this obliquity is ubiquitous in the geometrical relationships engendered by the digital devices we carry around. Apparently 20% of the time the average iPad user spends with their device occurs in bed ([min](#) online article). This sounds odd until you reflect that many readers probably enjoy an equally inclined relationship with books, those other most ubiquitous of everyday objects.

References

- Connor, Steven. 2010. *Inclining to the view: A talk given at the symposium Seeing From Above, Wellcome Trust, London, 6 February 2010.* ([online copy](#))
- Coyne, Richard. 2010. *The Tuning of Place: Sociable Spaces and Pervasive Digital Media.* Cambridge, MA: MIT Press.
- Weiser, Mark. 1991. The computer for the 21st century. *Scientific American*, (265) 3, 66-75. ([online version](#))

We explored similar technologies to Aurasma mobile phone image matching with [Mobile Acuity](#) in 2008. Also see project website: [Branded Meeting Places](#).

Category

1. Body

Tags

1. augmented reality
2. obliquity
3. ubiquitous computing
4. ubiquity

Date Created

June 25, 2011

Author

rcoyne99