

Searching Cadastral Records

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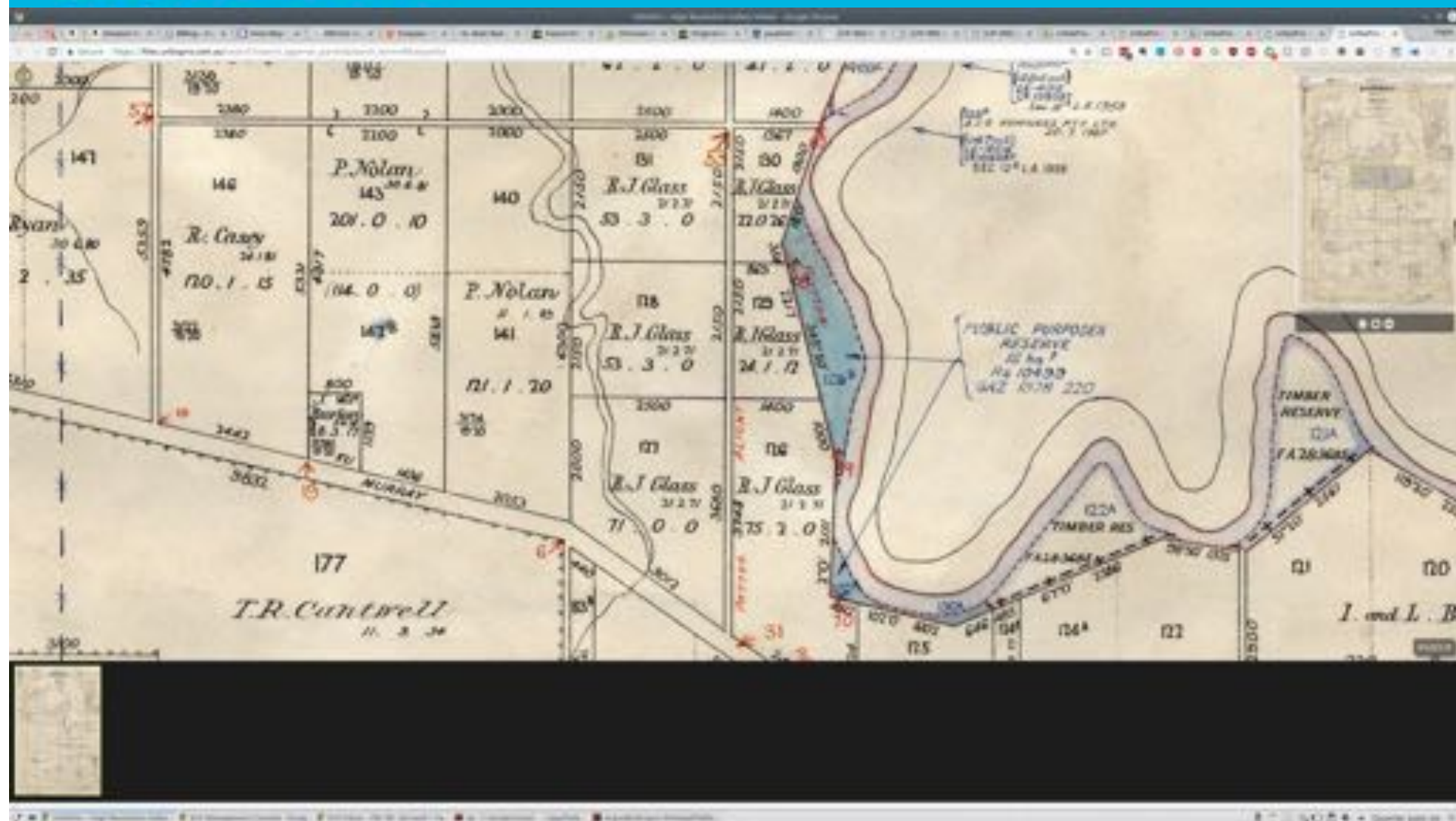
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SPI: PC363321 Purchase ([Package, Plan , Title](#))
Address: 93-109 ANNESLEY STREET ECHUCA 3564
Lga: CAMPASPE SHIRE
Parish: ECHUCA NORTH FN [Register](#)
[List of Parish Sheets/Charts:](#)
[Central plan office record plan - Parish](#)
Locality: ECHUCA
Township: ECHUCA TP
[Township Plan](#)
[Central plan office record plan - Township](#)
MGA of Point 297681,5999160 (Zone 55)
MGA of Parcel Centroid 297679,5999166 (Zone 55)



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LAND VICTORIA

Cadastral Fieldnotes

09:21 AM

05/02/2013

Page 1

Section	Allotment	Number	Type	Date	Re-marking of Allotment
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2724 GREENSBOROUGH

	32E	79/ 788		2/1880	
	49A	83781		5/1877	
	2005	122641	F	6/2008	
	ROAD SURVEY	77/ 734		10/1877	
	ROAD SURVEY	77/ 869		8/1878	
	ROAD SURVEY	77/ 870		8/1878	
	SCHOOL SITE	76/ 703	F		
A	9B	C-A 5889		11/1891	
A	16	78706	P	2/1881	
A	16B	78707	P	12/1881	
A	17	83013	P	8/1877	
A	17A	C-A 7173		4/1921	
A	17D	106484	P	7/1983	
A	29	39351		3/1947	
A	35A	51375		5/1921	
A	41	187		8/1889	
A	43B	35365	P	10/1920	
A	43E	35365	P	10/1920	
A	450	30355	P	4/1890	

Error Ellipses – AR, VR, MR

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Outline

- Review of difference between Virtual, Augmented and Mixed Reality
- Error Ellipse – recap

Future Opportunities 10.1m in 2016 to 99.4m in 2021
– Number of units



Virtual Reality

- Replicate a real or create an imaginary environment.
- Blacked off. Eg. Goggles with no light.
- Person is simulated into the environment.
- Sights, sound, smell – simulated

Few issues – can be vomit inducing. Symptoms include general discomfort, headache, stomach awareness, nausea, vomiting, pallor, sweating, fatigue, drowsiness, disorientation, and apathy



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Google Cardboard

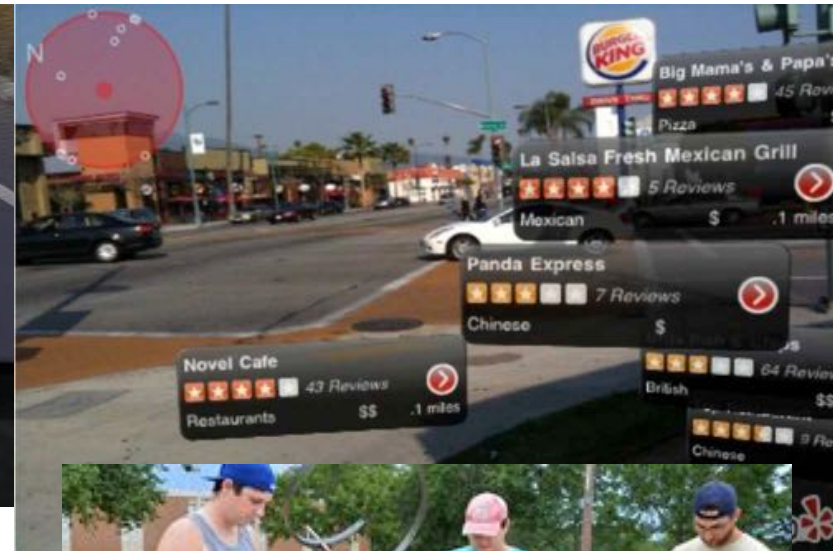


Samsung Gear

Augmented Reality

- Insert and overlay digital and virtual information into the real world.
- Still see everything (mostly) around you.

Augmented Reality Examples



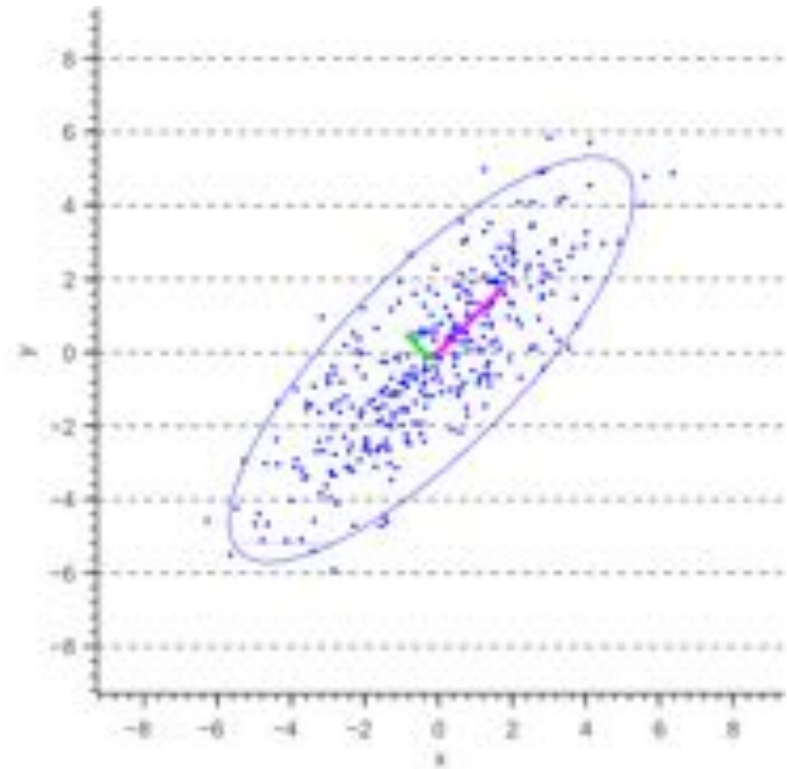
Mixed Reality

- Add sensors to scan the real world.
- Add virtual objects into the real world. Overlay 3 dimensional objects into the real world.



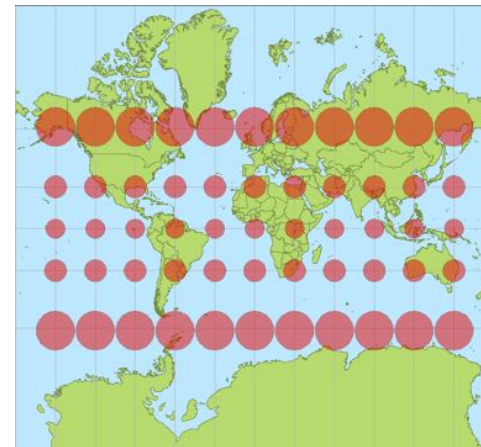
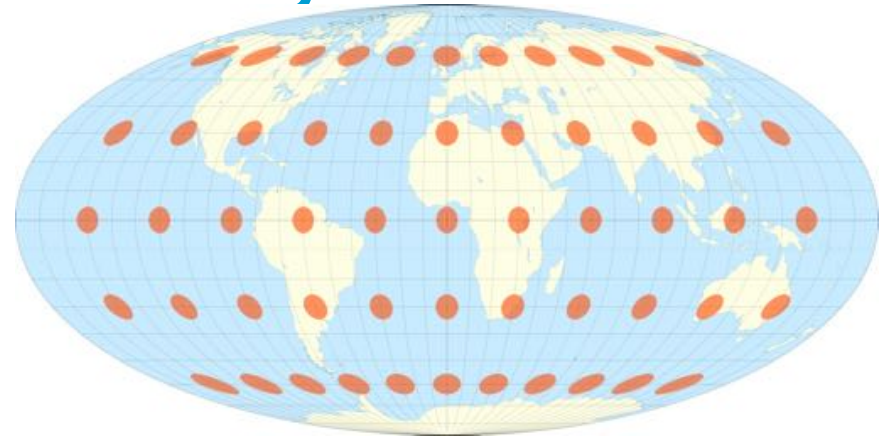
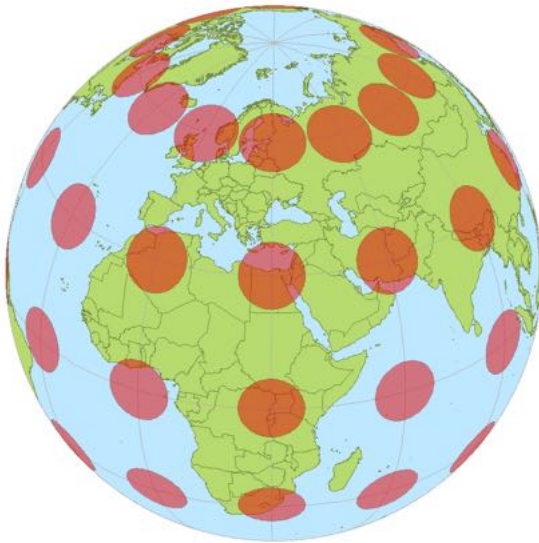
Error Ellipse

- Iso contour of the gaussian distribution.
- 95% confidence ellipse for a set of data.
- I.e. an ellipse that included 95% of the data.



Visualising Uncertainty

- Tissot indicatrix illustrate linear, angular, and area distortions.





Uncertainty in mapping

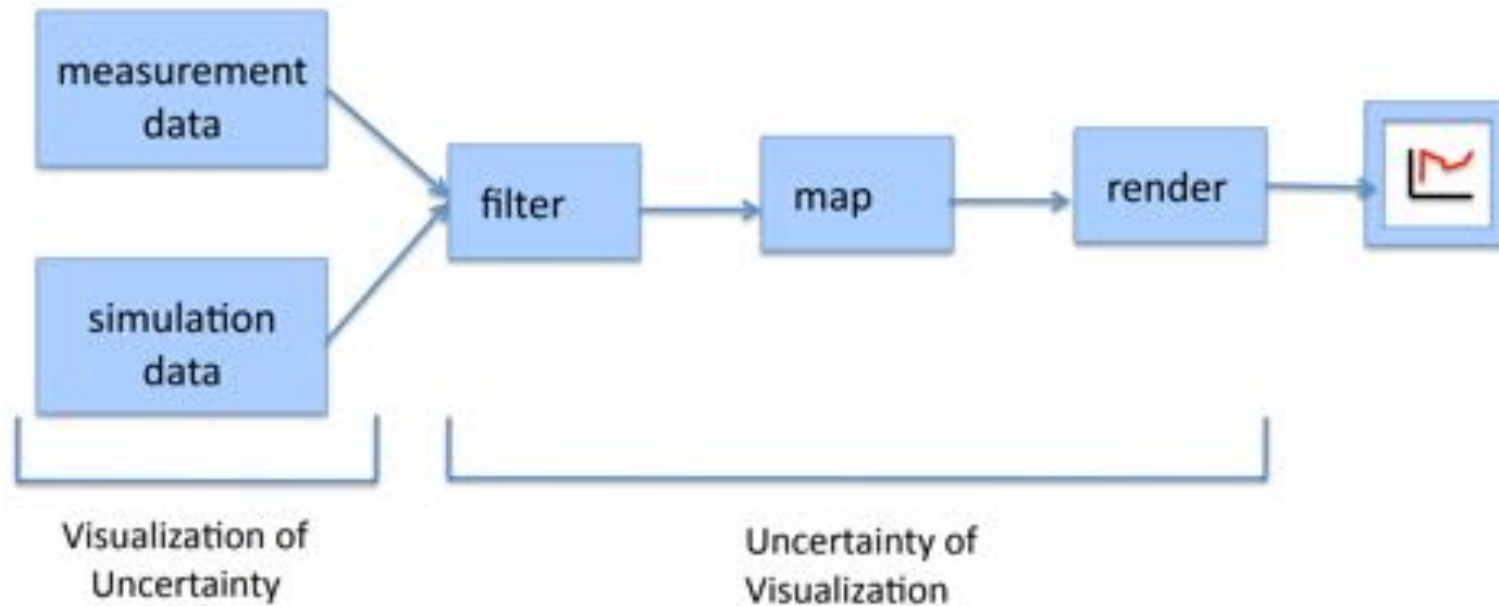


Fig. 1 Haber and McNabb model: visualization of uncertainty and uncertainty of visualization



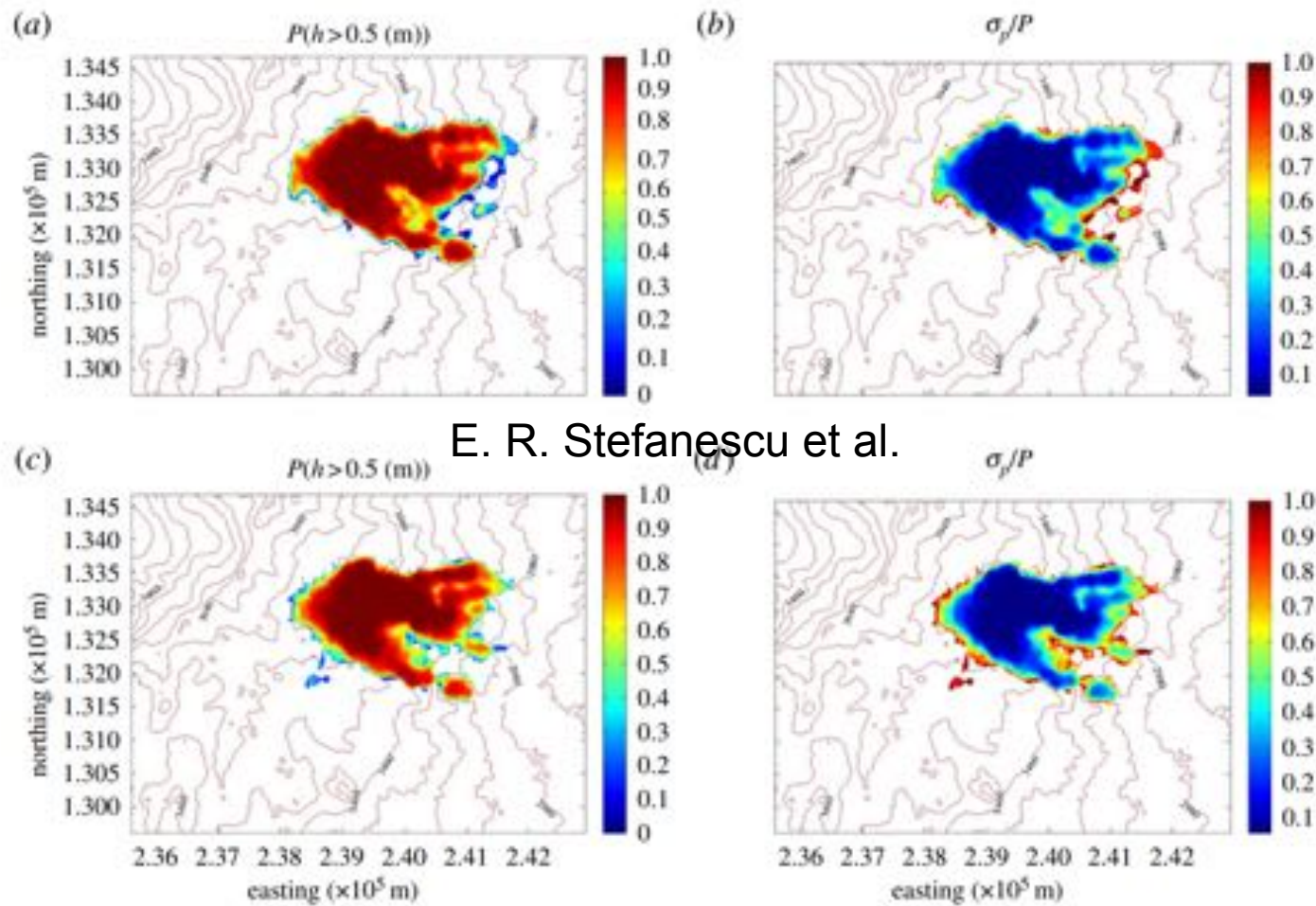
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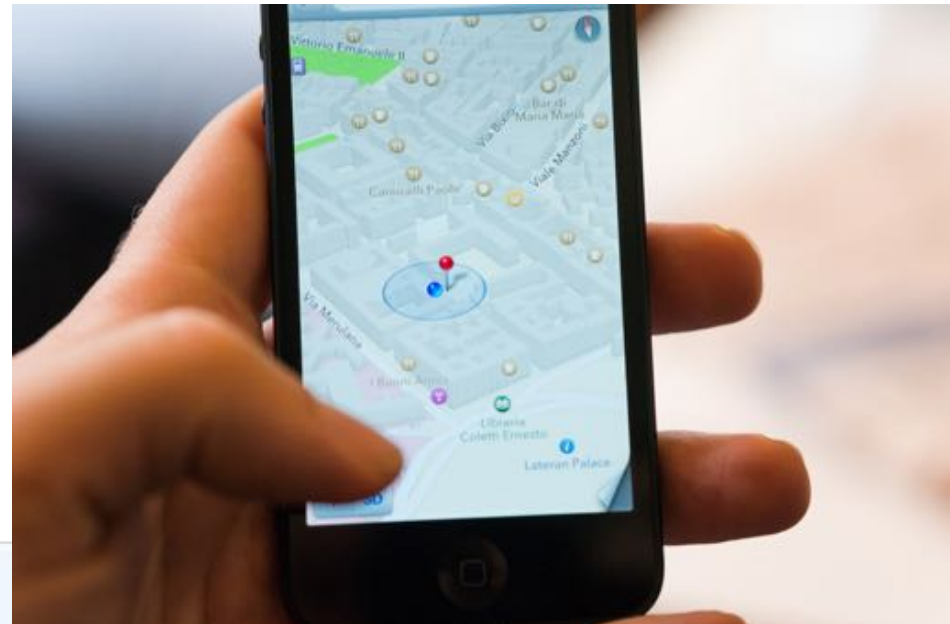
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Ways to convey uncertainty

- Juxtaposition – visualisation of the uncertainty alongside the image. Eg. graph alongside map.
- Animation
- Overlay – contour map of error field on top of heatmap of the mean value.
- Sound
- Colour



Map Comprehension

- Many people can't read a map. Increasingly less!

Amy Lobben – Geographer
– University of Oregon

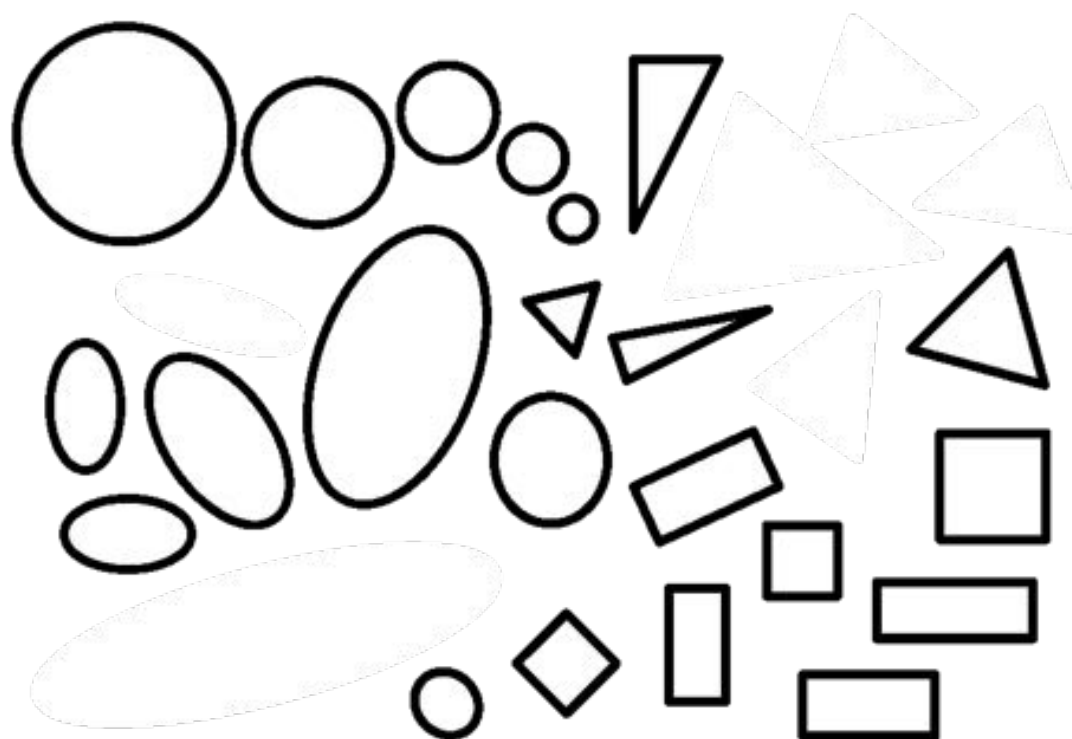
- People's ability to shift perspective from the street-level view in front of them to the bird's eye perspective of a map.





Map Comprehension

- Another map-related skill that varies from person to person involves mental rotation.
- If you've ever taken a standardised test you've probably seen puzzles that require you to look at a shape and determine which of two other shapes is identical to it.
- What makes it difficult is that you have to rotate the first shape in your mind to make that determination.





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Real Problem

- We are not engaged in visualisation.
- The future is more how others can visualise the information and gain insights with confidence.
- Moving from an abstraction – map, to being actually able to walk in the real data

- Emerging visualisation. For example, if people can be real/fake in VR there is the idea that real people have a halo/coloured glow.
- Snapping of dots. I.e. you can't place it in an absolute place.



Seen This Before

- Precision vs accuracy...



Exciting future

- Visualisation
- Opportunity to make new standards
- Standards emerge quickly – eg



Discussion

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