Discussion Notes

1. Relationship between confidence and risk

- Willingness to "trust" a technology is directly related to the consequences of a desired action (or adaptation).
- How can we best quantify confidence from qualitative data, such that it is useful at the application/decision level?
- Models that capture the extent to which a decision taken in error can later be reversed may help to increase confidence.
- Bio/Social inspired mechanisms are required to capture experience and carry out forgiving/forgetting. There is a need to differentiate between a bad interaction with newly encountered entities and those proven to be historically reliable.

2. User confidence in systems

- Studies show that there is low public trust in computer science/it
- Privacy models that capture and encode the social/ethical judgements we make when sharing data are highly worth exploring, especially as these projects envision open environments with widely shared/aggregated data
- Self-correction behaviour can be seen in some social systems, such as twitter, where widely spread rumours are followed by similarly spread denials
- These open systems operate on a "good faith" basis. Socially inspired models of trust and capturing of social values at the core of these open frameworks is one possible route to a solution

3. Innovative behaviour vs bad behaviour

- Not all deceptive behaviour is bad, and not all honest behaviour is good within an ensemble of agents/components
- For example, an agent may detect a forthcoming resource availability crisis, and, as a result, lie about the availability of the resource to encourage agents to consume/use less than they would optimally - this may promote sustainability of a collective in the long term
- Other agents may be able to determine that the first agent is lying about resource availability, but without necessarily being able to discern the intent or motivation of the deceit