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## **Brain functions : the challenges to integrate and assimilate climate information**

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The general public expects relevant, comprehensible and acceptable communication on climate change. Many efforts have been, and are still, being made to make the message clear and comprehensible. The key point is the acceptability of the message by the audience, which is seldom discussed in the literature. This presentation investigates the brain mechanisms, which allow it to understand, integrate and assimilate climate information. The brain faces challenges to integrate this information. We will tackle six of them here. Cognitive dissonance is one major factor. When receiving climate information, one understands that a change will occur. However, the consequences are so important that it is difficult to assimilate and project ourselves into this future reality. The future cannot be connected to something that is already known, and so it is challenging to construct meaning. In order to keep the system coherent, the brain distances itself from the information. The information that is heard will seem distant despite all efforts from the individual to assimilate it.

A better understanding of cognitive biases in communication on climate change allows building acceptable talks, such as increasing the integration of the information by non-specialists, which, in turn, will help to transfer individuals knowledge into concrete action.