# Summary of neural network architecture from Fagg et al.

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**AIP (anterior intra-parietal area):** combines information from dorsal and ventral processing stream -> computes the set of affordances.

It basically proposes grasps out of a given set of possible grasp types that F5 should execute.

For us this would translate to that when we let the visual input end here (or make a new network that uses visual features (dorsal pathway) as input), the network which represents AIP proposes grasp types to the downstream network. Grasp type here refers to the end goal of the hand with respect to the object. In other words AIP would compute (based on visual input) the goal we try to reach with a RNN.

This goal can additionally be updated when F5 changes the configuration of the hand.

**F5** selects one of the proposed grasps based on additional information and executes it. It also monitors the execution based on sensory input from S1. **F1** belongs to the same information stream.

Concerning our project, this means F5 sort of uses sensory information to reach one of the goals which was proposed by AIP. (perhaps clever to let AIP propose only one goal). F1 would belong to the same network.

F5/F1 (**RNN)**would then form a closed loop with the sensory information pathway. The network will try to reach a goal which it can monitor through sensory information.

With this insight I would propose a network that is divided into two parts decision making and execution. Where only visual information is used to formulate a goal and the information about the goal plus sensory information is used to reach a certain goal.

For the execution this would mean that the goal doesn’t necessarily change while the sensory input does.