Ways of Thinking: From Corvids to Children and Back Again

By: Dr. Nicola Clayton

Dr. Clayton has been working with Corvids for many years and has done research on their cognitive capabilities compared to young children. Dr. Clayton designed and ran several experiments created to test the Corvids to see at what age their cognitive capabilities rival that of young children.

The first experiment that the professor ran was having the Corvids cache their food in a location. The different ways that the professor went about this was by having different caching scenarios that the bird would take part in. The scenario of most interest to Dr. Clayton was the scenario where the bird was given an opportunity to cache their food but while caching their food there would be another bird watching where the food was being stored. Dr. Clayton noticed that after the food had been cached in front of the observer that the bird who cached the food would generally come back and move the food to another location, generally a new location that have never used before, once the observer who saw where they cached their food the first time had left. Dr. Clayton also noted that this was not actually the case when it came to all birds. It was generally only true for birds that were used to the lifestyle of stealing someone else’s food that would take part in this activity. She said it falls under the frame of “It takes a thief to know a thief”.

The way that Dr. Clayton ran this type of experiment on children, who were 2 years old, was by using a set of non-transparent cups and using a sticker as the item that the child would cache in one of the cups. While the child was putting the sticker on one of the cups their mother would be there with either her hands covering her eyes, so she cannot see where the sticker was cached, or she would not be covering her eyes, so she could see where the sticker was cached. In each scenario after the sticker was cached the child would then ask their mother to retrieve the sticker for them. In the scenarios where the mother did not cover her eyes the child only asked for the sticker to be retrieved. However, in the scenario where the mother had her eyes covered while the caching of the sticker occurred the child would point to the cup that contained the sticker while asking their mother for the sticker.

Dr. Clayton believed that this showed that the children were capable of distinguishing between the fact that their mother could not see the sticker being cached to some degree. However, she also thought that the children were capable of doing this task because of their past experience with the Peek-a-Boo game that they most likely played as they were growing up.

Dr. Clayton ran her experiments on a variety of age groups of children and found that usually by the time that the child reaches the age of 8+, they were able to relatively easily complete all the tasks that were asked of them. Dr. Clayton had only used the same set of birds throughout the experiment so could not gauge the age learning curve of the birds throughout
their life since she started with fully grown Corvids. Dr. Clayton has said that she is going to be getting new baby birds around the end of May/ early June and would like to retest the baby birds in the experiments to see what kind of cognitive capabilities the birds develop as they mature into adulthood. She wants to see if the capability to do these tasks is due to the parenting style of these birds or if it is more instinct/intuitive by nature.