Mirror, Mirror On the Wall, Who's the Smartest of Them All?

by Michael Bevilacqua
October 2011



JR Big Leo - my 'little' boy is still learning and just as cute

Humankind has the habit of believing that everything around us is either for our personal use and compare or relate other forms of life to what we consider the only standard of perfection - ourselves. That comparison may not be a conscious choice, yet it is automatically made.

We tend to base intelligence of other species based on the comparative size of their brain to ours. This is also reflected toward our own ancestors although a complicated process of making an ocre paint, dating back 100,000 years, was discovered by Dr. Christopher Henshilwood, an archeologist at the University of Bergen in Norway and the University of Witswatersrand in South Africa. The typical standard regarding brains is that if it is not like ours in shape, size or perceived function, then there is no possibility of human-like intelligence. This view is erroneously projected onto our horses. Let us take an example of one of

the lowliest life forms, the ant. They have no brain, as such, only mammals have a cerebral cortex. Compared to humans, they only have a handful of neurons. Ants have approximately 250,000 neurons that comprise the brain. In insects, these run along the length of the body and are called ganglions. Humans have approximately 11, 000,000,000 neurons.

Yet, ants can teach each other. There can be a teacher who can help a pupil find a food source. It is not just demonstration, such as "follow me". The teacher will help correct direction, and slow down at times, at a cost to itself, to allow the pupil to integrate what he is learning, direction, landmarks. The pupil will signal to the teacher when he is ready to continue. The pupil, once having assimilated this information, can then become a teacher to another ant.



True teaching always involves feedback in both directions

In the April 2011 newsletter, *The Missing Link*, can be found other links about our brain. We are still discovering our own brain and have been surprised to learn that when an area that controls some specific function is damaged, we can reteach or re-wire how our brain works to make something function again. We can, at least, trick the brain into believing that all is normal. An example of this is getting rid of phantom pain using a mirror box. Careful placement allows reflection of a good limb in place of a missing limb. A little exercise each day,

synchronizing the two limbs allows the person to see movement of a limb that is not there and thereby decreases or eliminates pain caused by confusing neural messages that the brain picks up from nerve endings leading to the missing limb.

Our brain makes shortcuts all the time. We can see things appear as they are not, not see things that are right in front of us and ignore or block out what is in front of our very eyes due to our own beliefs.

You may have seen such an example through a video clip available online called the 'Invisible Gorilla'. The task is to count how many times a ball is passed between people wearing white or black T-shirts. You are focused on counting the number of passes between those in white T-shirts and fail to see a gorilla, pounding his chest, walk right into the middle of the frame.

During the International Seminars over the recent years, I show a super-brief clip called the 'McGurk Effect'. The results are a little more complicated. It involves that which our brain inherently knows in conflict to what is seen and what is supposedly heard. This disparity causes the sub-cortex of our brain to make a compromise between auditory and visual signals thereby producing and presenting to us something completely new. Everyone gets the same answer depending on whether they watch the clip or only listen to it. That is, there are two answers: one that is heard while watching the video and a different one that is heard when listening only. Even once you know the answer, it still happens all the time. There have been only a handful of people over the years, from all the workshops where this has been shown, who are highly intuitive and are not deceived by exterior stimuli and believe their 'gut' and get the true answer.

In 'Beyond the Dream Horse' I mention the book, 'Blink: The Power of Thinking

Without Thinking' by Malcolm Gladwell. They are all tied in some way and make interesting viewing and reading to help understand ourselves.



Relaxed but focused and in the moment even for distractions

Art, culture, advanced learning have all developed during periods of abundance. So it is with horses. When they are fully satiated they will play with that ball amongst themselves - the one that they totally ignored while you first tried. They did observe and learn, however. They will pick up that cone or a branch and have a tug of war between two horses. That is the best state, or time, for them to be in if you want to teach them anything. They need to be healthy, feel safe and with all their needs fulfilled.

The time of day is also important. Take notice of their up and down times. Go along with their rhythm to either incorporate play, focus/curiosity or relaxation. When they are restless or, for example, nearing an appointed time of day where they get some carrots and apples, that would not be the ideal hour to try to get

focus to learn something new. When they have ate, played and then go into a sort of siesta or rest period, that is when I will do hoof trims. The otherwise most reluctant horse will be a perfect 'gentleman'.

In my book I also mention how horses, in conventional training, are always expected to learn the words, walk, trot, canter, whoa. Why, then, is it commonly believed that horses cannot learn much more? If they do, it is often believed to simply be some kind of entertaining circus-like trick. People who have horses, either stabled somewhere but mostly those who have them at home, probably already know that we can share quite an extensive vocabulary. You can go further by making a lesson or class based on that.

If I go outside and see only four of the five horses, I will ask where is the missing horse. I say the name. The other horses, or at least one, will look in the direction of where the missing horse is located. This started by accident because I noticed it while I would be asking myself that question out loud. In our own little, created world at home with the dangerous, outside world only a fenceline away, I decided to elaborate on their learned knowledge, expand awareness and art of communication.

In my own experience from 2005, when I was suddenly immersed in the Russian language while helping to build the initial Nevzorov Haute Ecole forum, I learned a type of visual short-hand for language. For example, what I see as KRACC, (класс) I know that, to me, it means 'forum' in Russian. It really means 'class' but school or forum was the same thing at that time. It is not specifically the word itself, it is my identification of what that *group* of lettering means to me. Sometimes through exposure or focused necessity, I

learned many more words this way and pieces of the alphabet. This continued without actually learning the actual language, however. Although I learned to understand the communication, or some of it, someone who did not know this would think that I could speak and read Russian. I decided to use the same visual learning with the horses. In a positive human sense, for a change, since I could do it, I never doubted that they could do it.



The image board



Primo pointing out a passer-by at that moment

I started with photos of the other horses with the name of the horse printed below the picture. Also, photos of the dog, the cat and different people that they know, including generic images depicting a man and a woman. If I notice something different when arriving at home, the horses could tell me if either someone we know or a stranger showed up while I was away.

They easily identified the photos of other horses, even people, by pointing them out (touching with the nose) when I gave a vocal name and indicated toward the board. This was without any practice. They already knew who's who and what name they go by. This is no surprise just as they already know what 'trot' means or bucket or hoof or apple.

This learning is simple, fun, expanding, practical and on-going. With time, I tried removing the image of a horse but left the printed name. The 'pupil' would know the image was missing and point out the actual physical horse in the field. I gave the answer to the printed word, letting the horse know that I wanted it to be chosen specifically on the board. Now written names can be identified just as I was able to know what KRACC means.

I'm not trying to prove anything. This is not more than what people who have horses already know, to some degree or other. Maybe you just never thought of taking it a little further. It is just a more structured approach and may help to let you see your own horse in a different light.

I have become so comfortable with my life at home with horses. There are times that I am reminded that what I see as the color blue is not blue to everyone. I have become so accustomed to how the horses are that I take for granted their everyday expressions and actions. I only realise this when someone visiting will

fall on his or her backside in awe after a horse does something that I consider perfectly normal within our little family. I also realize that my own experience has brought me what I was particularly looking for in horses. It was not a goal to find something specific, however, the results ultimately led to a way of life with them where I find a satisfying happiness. That experience is what I hold dear to my heart.

Some may think that trying to teach this to a horse requires this rudimentary form of visuals because horses are quite 'simple' as compared to human intelligence. I picked up on those visuals in Russian quickly and believed that the horses could do so in the same manner. Not because they have similar intelligence to humans but because the horses could simply do it. This is not to put on a show or because it is cute. I want them to stay as horses but this is to help the horses learn from me, 'talk' to me; for us to understand each other in a way that is generally considered impossible.

Along the lines of the famous quote by Mark Twain, Swiss pilot, Bertrand Piccard, is building a solar powered plane that he plans to fly around the globe by 2012 or 2013. The solar panels are along the top of its 64-metre (209-foot) wingspan.

After aircraft manufacturers said Piccard's specifications for that length of wing would be impossible, he turned to a racing yacht manufacturer to build the airframe.

"They did not know it's impossible, so they did it," he said.

From my own learning experience, I eventually did learn the distinction between 'forum' and 'class' regarding the word kласс through familiarity with

the letters within the word. Would it not be just great if our horses could learn the alphabet and spell things out? Coming to this point, where they know words, identify objects and groups of letters, why would we think that they cannot?

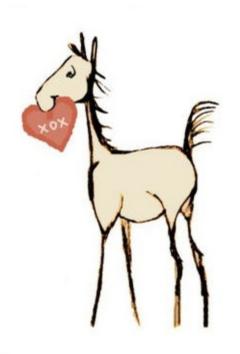


Image courtesy of Artist/Photographer Jessica Drake

See Jessica's Gift Shop (click image above) or visit http://www.thepaintingpony.com/ for artwork made by her horse, Buddy

References:

CBC.ca: Quirks and Quarks: Prehistoric Paint Box

Physorg.com: Teaching ants: First demonstration of 'teaching' in non-

human animals

PainAction.com: Understanding Phantom Limb Pain

The Invisible Gorilla: Video test

University of California, Riverside: McGurk Effect

Malcolm Gladwell: Blink: The Art of Thinking Without Thinking

Bevilacqua, Michael (2010). Beyond the Dream Horse, Quebec, Canada: ISBN

10: 1453725261; ISBN 13: 9781453725269

Physorg.com: Solar Impulse: Swiss Pilots Aim to Circle World in Solar-

Powered Plane

Hauteecole.ru: Manege Reading