

Students, parents, staff, and faculty,

In the fable *The Fox and the Grapes* by Aesop a fox sees some high-hanging grapes and wishes to eat them. When the fox is unable to think of a way to reach them, he decides that the grapes are probably not worth eating, with the justification the grapes probably are not ripe or that they are sour - hence "sour grapes".

This is a classic example of a phenomenon called Cognitive Dissonance which is the state of mind when either opposing cognitions -ideas, attitudes, thoughts, beliefs - are present simultaneously or there is present a cognition that conflicts with the person's behavior. Cognitive Dissonance Theory is that the dissonance produces a tension which acts as a motivating force to reduce the tension by altering existing cognitions or adding new ones.

Now, what connection does this have with the occasion of the end of this year's camp ?

I believe that explaining this, which is my goal in the next few minutes, has serious relevance to the scholarly lives awaiting the outgoing campers. Those of you other than the campers may want to consider this an advance look at a chapter of my book on the relativism of perspective that I expect will see the light of day in 2014.

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In the case of two conflicting cognitions, one cognition can be revised to reduce the dissonance. In *The Fox and the Grapes*, the fox had opposing cognitions - the grape is good and I want it. By seeing the grape as sour it has reduced the dissonance in the two cognitions. Alternately, the mind adds consonant cognitions - often by seeking out new information that supports the position. This is called Rationalization, which is the process by which the human mind reduces cognitive dissonance by either changing or rationalizing attitudes. Studies in social psychology support that the mind has a propensity to seek relief from cognitive dissonance through rationalization.

Much experimental support, too many to list, exists for cognitive dissonance theory that it is now widely accepted. Many nature phenomena also stubbornly support the theory. An instance is that of humans living with their own flatulence. Whereas we find the punchance of another's flatulence uncomfortable we find our own as perfume.

Cognitive Dissonance can at least partially explain diverse social phenomena.

Take Buyer's Remorse - Shortly after the purchase of a product the buyer often experiences doubts. Did I buy the right product or service? Did I get good value? Should I have even purchased it? The consumer then reduces the cognitive dissonance by rationalization.

The couple in an arranged marriage suffers from buyer's remorse and will justify the marriage more than a couple who dated and married.

Take what I call the Fallacy of the Ex - People in romantic relationship with a new partner think that the new partner has many qualities lacking in the ex partner and hence the new partner is better. But this is a subconscious resolution of cognitive dissonance; they have to believe that the new partner has those qualities. The existence of those qualities is either the truth or a dissonance-reducing attribution.

I am quite bald! I take the lone long hair on one side all the way across the dome in a perfect geodesic! Here is the homework: Use cognitive dissonance to explain why I must do this.

Take Physician's Talk - A good doctor is one who not only knows the right treatment for the patient but strives to reduce the dissonance in the patient by sweet talk.

Many parents of the MathPathers are successful employers and must have written many Employment Rejection Letters. Most rejection letters try hard to assuage the candidate who did not make it. It is as though the letter's writer has empathy on the dissonance that would occur in the recipient and is guiding to reduce the dissonance.

An individual who forces himself to hide his true emotions, such as those who work in customer service or sales, may

experience cognitive dissonance. A camp director is under stress because he is under constant cognitive dissonance.

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So what has cognitive dissonance got to do with you, the MathPather?

In life you will be working with people. Be nice to them especially if you do not like someone! Why? If you do not like someone, try to be genuinely nice. Then you will experience dissonance and your mind will try to reduce the dissonance by adjusting the attitude so you dislike him/her less now. If you do not like someone, do him/her a favor. You will then experience dissonance and try to reduce it by adjusting your attitude so you dislike him/her less now.

If someone does not like you, get them to do you a favor. They will then experience dissonance and improve their attitude in your favor so as to reduce the dissonance.

You hold high promise in mathematics and many of you will become mathematicians, scientists and successful entrepreneurs with the attendant feeling that you are very special. Cognitive dissonance will force you to create fictions that will absolve you of responsibility, restoring your belief that you are moral, and right-- beliefs that will often keep you on courses that are dumb, immoral or wrong. Rationalization proceeding from cognitive dissonance will get the better of you. In those hundreds of instances that are to

come for you, I pray that you counter each. But how does one counter?

One attribute you can grow so you can successfully avoid many fallacious positions is epistemic humility. Epistemic humility is a disposition to adopt an epistemic stance that we are limited beings that are prone to overconfidence and error.

Consider the parable of “Odysseus and the Sirens.” In Odysseus’ voyages he was told of the mermaids whose beautiful song would lure the ship to get wrecked against the rocks. Odysseus ordered the sailors to plug their ears with bee’s wax, with himself tied to the mast, and no entreaty from him to free him to be honored. Odysseus, whose ears were not plugged, was overcome by the sweet song of the sirens, but the sailors stood by his earlier orders and the ship was saved. The moral of the parable is this. By accepting and even embracing our limitations and failings as cognitive agents, rather than denying them, it is possible to improve the quality of our judgments and make more rational decisions better than we would otherwise. After all, this is how judgments are made by trial and error in the natural sciences.

Since we all have limited experience, our conclusions should always be tentative, modest, reserved, cautious. This conservative, fallibilistic position, which Hume calls *mitigated scepticism*, is the proper epistemic attitude for anyone

“sensible of the strange infirmities of human understanding”,
to quote Hume.

Go now, you mathematical Odysseuses!