

*[Previously on Beyond TPT: Nervous about being at his new school Hogwarts, Harry Potter is somewhat surprised when he bumps into Gandalf, smoking in the broom cupboard. However it turns out to be an illusion, caused by the hall porter. We don't know why Potter was going into the cupboard yet. Now read on...]*

## Beyond The Porcelain Throne

Series 2 /6

What Have the Darragdomians Ever Done for Us?

We are surprised when reaching the Darragdomian tent that all the other ambassadors are in there too [well I was surprised even if you weren't]. Conan the Librarian looks very pleased.

"Actually we've got together," he says, although that much seems obvious, "and we'd like you to check the decryption software with us, so that we can change over anything that might be dodgy, okay?" [I'm aware that you don't know how to do this yet, so just keep smiling and looking cool and I'll talk you through it. I may not have to, though; -it looks like the Darragdomian has prepared a lecture.]

A holographic Power-point sphere appears in the centre of the tent. It has a list of things on it that reads:

- Emotion
  
- Interpretation
  
- Perception
  
- Imagination
  
- Learning
  
- Memory

The words all start swirling around like a lava lamp, mixing together. Then they form the six points of a snowflake, with "association" written in the middle.

"All this," the Darragdomian says, "Takes place in our department. And the work of all other sections depends on our getting the message relays right to other departments. So it's very important that we translate accurately what's going on 'out there' according to the sensors, and also convey your orders clearly to the others about what you want to do in the real world; what

interactions you are involved in, and so on. That's what we need the software for.

All our decisions are based on voting, because we're strictly democratic. We vote on what chemicals to attach to messages and where to send them; the bigger the vote, the bigger the hormone package. If we get it wrong, you'll make a mistake about what's going on in reality and you might also display non-beneficial behavior. All we really do is move information about and make comparisons, and that's what we'd like to talk to you about; making sure the comparisons are accurate. That's where our processing software comes in.

"You see, the Toilet Lords are pretty crude but effective hackers. The ship's computer is designed to make comparisons using your own natural software, but the Toilet Lords make alternative, fake software full of bugs and miscalculations that overwrites the original. This software can affect the whole system, and stop you from learning anything new. The software deals with translating input in terms of emotion and language.

"Emotion and language are what we call flexible systems because they can use any template. They have to be adaptable, or all humans could only ever learn one language. So you have a language template, but any language will fit; you end up learning the one you hear the most, as is your social nature. If you don't get any examples at all, you never learn to talk [although the template will still copy the grunts and squeaks, if you are raised by squirrels.] But learning a language isn't just about the sounds of words we speak, our dialect or our accent; it's also about the meanings we attribute to words. We compare information about words with what we think they mean.

"Every species has a 'most likely meaning' for every word, that they will vote for. If you say 'magic' to a Cakdon they might think you mean Voodoo, a Darragdomian would think of Wizards, a Gnome would be more likely to expect card tricks, an Orlian would think you meant "brilliant!" and a Vulcan would write off the word as connected with 'irrelevant, superstitious nonsense'. Associations are important, as we discussed in the introduction to this story. We have to figure out which one is correct in every circumstance, and if we're only getting input from certain sections, we could get it wrong. Ships that don't have all sections including a bridge crew can't see all the possibilities, d'you see? [Except possibly on LSD]. But once the wrong meaning is programmed in, it's stuck there.

"Now, what most humans don't know is that the same is true of emotion. If we see a cat when we're small and we're told it is called a duck, we will believe that. We'll go looking for ways to

learn more about it, but we'll carry on believing it's a duck until we hear sufficient evidence otherwise. If we never hear evidence otherwise, if everybody believes the lie, we'll keep that interpretation –small, furry, purrs –must be a duck. And we may then be taken by surprise when something deleterious results, for example we find that this 'duck' objects violently to us trying to lower it into the water.

Likewise, if we feel a certain way when we are small and we are told it means 'x', we will believe that. If we are feeling the emotion of dismay at a deleterious injustice, but someone tells us it's called "jealousy", we'll believe that, and we'll also go looking for ways to learn more about it. We'll seek out examples of it and we'll copy them, just like we do with language. Invariably, examples of sentiment lead us and others and whole situations toward harm, but if we are given no examples of beneficial ways to act, what choice do we have?

Having the correct or the dodgy language or emotion interpretation software affects the way we interpret everything, because we can only run one lot of software at a time. The wrong words [like 'guilt'] pull us into not only learning to copy these sentiments but also missing out on what we should be feeling instead. People running dodgy software fill themselves with poisonous hormones and miss the effects of the regular shots of healing hormones as well, because the dodgy software can't produce those. That's why, when in anxiety, we are unable to learn anything.

The virus software spreads by us using both the words and the examples of sentiment, so we have to be aware of that. Watch your output as well as your input and think about the words you use [remember that you witness everything you say yourself, too].

The emotion system is easy to hack because it is malleable. There are nowhere near as many different emotions as there are individual circumstances in life, even taking into account all the combinations of chemicals that comprise overall brain chemistry. So the available ones are flexible; they can be interpreted in various ways.

For example, if we are filled with adrenaline and alone on a wobbly bridge, we will feel either nervous and panicky or excited and courageous. [As an adult, if we are there with someone we fancy, we'll feel horny.] Which is real? Scared, or excited? The fact is, in that situation, you're the Captain. This is how Captains control their reality. That anxious feeling would certainly dominate if it went through the Empire's software. Going through nature's software, though, it feels like excitement and attraction. Which would you prefer? Excitement is likely to be the most

beneficial choice, because in a state of excitement your responses are more accurate and concentration is more acute, whereas in a state of fear, you may be paralysed into non-action or find it hard to concentrate and make bad mistakes. That's not beneficial to survival and thriving, whereas exploration is.

Obviously, we do need to be aware when 'nervous' wins because something is truly too dangerous to risk exploring! That's what we need the Vulcans and the Orlians for, see –the Vulcans can calculate the odds for and against, and the Orlians can invent safer ways to deal with everything, creative ways of working with it. So you can understand how they also will get confused if their messages are wrong. Their calculations can be off, and that's not beneficial to your wellbeing. The Cakdons tell you it's beneficial to explore anything unknown but the Vulcans tell you it's not beneficial to explore putting your finger in the wall socket because the Cakdons can't make the ship run away that fast. We all have to work together.

However, I digress. You can see the problem now, right? The Toilet software tells us "this is guilt", and they give us lots of examples of it on TV and so on to copy. Naturally we think that's normal, so we copy it. That's how we learn, Sir; we copy things. That's how we make your memories; we make copies of events. And we never learn how to feel real emotions if we never see examples of them, right? Obviously in your case some of us have, because otherwise we wouldn't know the difference, but it's good to be aware of fake software because you need to make sure the right stuff is running in order for your brain to stop feeling anxious so that it can learn and remember stuff really well. You need to know the difference between natural stressing and harmful anxiety in order to assess how your software is performing, so our lovely Cakdon colleague will now demonstrate why." He gestures to Glenda. "Would you care to demonstrate the first part of the learning cycle, now, ma'am?"

Glenda is glad to. She stands in front of everyone and starts working out with two dumbbell hand weights. "See what I'm doing?" she comments in heavily accented english as she swings. "I stress the muscle, I relax the muscle, stress, relax, stress, relax...In the same way, I learn –I awaken and explore things, then I relax and sleep and eat and laugh, and when I awake, I understand. I stress my mind, then I relax it. This is the first bit of how we learn naturally. Just enough stress-relax. Too much stress, muscle breaks. Too much relax, muscle atrophies. Chronic stress leads to Margaret behavior. Chronic relaxation leads to Floyds. Thankyou." She sits down again to appreciative applause.

"Thankyou Glenda. The first part of learning is for the mind to explore the unknown. It must do so fearlessly and attentively in order to learn well. When new unknown input comes in, we send a hormone package out to make you feel interested and curious, which begins the desire to

learn. At this point we've only got the basics, for example we may know that whatever is going on in Reality is not dangerous, that it's emotionally important, that it might have something to do with sex, and that it's addressed to the bridge telling them to pay attention. As soon as the guys up front have it, the second part of learning starts. They will run a more detailed scan, and start really paying attention to what's out there giving us this input. In this case it was Glenda working out, so the guys up front were able to compute an appropriate response, because you've got Vulcans there telling you she's demonstrating the facts about my lecture and Orlians appreciating the creative artfulness of her display. So we clapped. We do know that some of the Cakdons out back might have provided a more boisterous response, but they are not in charge; you are.

"Are you beginning to see some of the complications of balancing the behavior of the crew if you were to try to do it the hard way -'Top Down' or Margaret fashion like a police force, instead of through entelechy? The good news is, just like your heartbeat and breathing, once the crew settle into doing the right thing at the right time with a few simple rules controlling things from the bottom up, they are very loyal and they do tend to stay there. Once you have established them in good habits it's only up and up. It can be a little tedious at first, because we'll continue to copy whatever we are used to out of habit until it's replaced. So if you want us to behave in a certain way, all you have to do is give us examples of different habits. Movies will do. We love stories with genuine emotions, we love fantasy and sci fi, and we learn quite a lot from movies, because facial expressions are important to us. They are maps too. And that's the secret of the third part of natural learning –we copy things. By copying facial expressions for example, we can tell how the owner was feeling, and allow you to copy that emotion too, if you want to. That's empathy, and it's one of your superpowers.

Empathy is how we produce the appropriate brain state for learning anything –that's the same emotional state it should be performed in. It relies upon clear perception. The Gnomes and Cakdons run the senses but we run perception; the looking glass, the great mirror in the mind or "Mind's Eye", that's why we wear the sign of the white rabbit, which means analogy."

Mr Stock stepped up. "Allow me to make this clearer –the Darragdomians translation work is to turn digital binary information they get as input into analogical signals, then send out the relevant messages and hormone packets in languages that each section can understand. We Vulcans analyse the information from them and sort the facts from the padding, and we store the facts as a part of your memory during the final part of learning."

Anashar stepped up also. "That doesn't actually make it clearer to me, Mr Stock. But we analyse the information for creative ways to interpret, respond to, and change a situation,

because that's the final stage of your learning after copying; practice and variation. While the Vulcans store the declarative facts about things, we store the procedural instructions how to do things. But to fully understand anything we must play with it, experiment with it, think about it, joke about it, and try other forms of it. All sections send back information to add to the associative memory the Darragdomians use. They are the only species who can build bridges."

"Build bridges?" said Mr Stock, with one eyebrow raised. Anashar nodded. "You'll see. They'll talk about that next, I bet. Personally I'd rather find out more about the looking glass and the rabbit, it's given me an idea for a great story..."

"That would make for a better chapter," agreed Conan, who of course heard this [or possibly lip read it], "but only if your dudes will do the special effects. Series three has to be a big production with lots of special effects, or everybody will get bored, put the Cakdons or Gnomes in charge and all go back to reading porn and taking too many drugs...I know! Let's vote on it. Okay that's Anashar [and I must say myself] would prefer to talk about mirrors and rabbits."

"And me!" said Glenda –"Get me a room with mirrors large enough, and I will go like a rabbit and move the Earth, hur! Hur!"

"Well I'd prefer to hear about building bridges," said Mr. Stock. "So would I," said Gaz. They turn to you –"Captain?"

[Hint: How to make this a Rush event: both are beneficial, so change the rules and vote for both. Allow the most popular choice to come first, however. Vulcans and Gnomes are good at waiting patiently. Darragdomians and Cakdons are not, and the nature of Orlian creativity means it's very important for it to grab its inspiration as soon as it can.]

This ends series two of this story. Think about what kind of software you are running, because you may want to upgrade. To do that, you have to go to Wonderland. Where is Wonderland? In series 3 we'll find out. Don't forget to bring a towel.

