

2.7 The Ultimate Question...Where Did I Come From?

In this conversation, two stalagmites are having a conversation about their formation.

Drop: Drip, drip, drip! That constant dripping is making me crazy!

Plop: I would think you would be used to it by now. I just kind of tune it out.

Drop: Tune it out! Tune it out! Are you nuts? I swear I would do *anything* to have that dripping stop.

Plop: That is terribly selfish of you now isn't it?

Drop: What do you mean? I think just about everyone in here would like to experience some silence for a while.

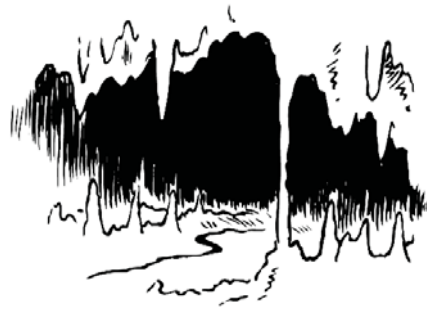
Plop: I beg to differ. All of those little stalactites and stalagmites are still growing from all those drips and if the dripping stopped, they would be left high and dry...quite literally.

Drop: What do you mean?

Plop: Oh come on, you know that those drips are what makes those little guys grow.

Drop: I say again...What do you mean?

Plop: You have to stop thinking about how much you hate the dripping sound and look around.



Drop: Point taken, but I have rather lousy eyesight. Now tell me about what these drips have to do with the little ones.

Plop: Let's take it one step at a time. When you stop fussing about the sound of the drips and just look around, where do you see the drips dripping?

Drop: Now that you mention it I see them dripping on top of the smaller ones.

Plop: Is it dripping on us old folks?

Drop: Let me look...on some yes, but on most, like you and me, we are pretty dry. Now that I think of it, I haven't been dripped on for years.

Plop: Do you remember when it stopped?

Drop: No, not really, but it did seem to just...stop...One day it was dripping on the middle of my head and then...no more.

- Plop: Have you grown any more since the dripping stopped?
- Drop: No! In fact, I may have even shrunk a bit!
- Plop: Now remember who you have seen the current drips dripping on.
- Drop: Ooh, I get it. Something about the water and the dripping helps us grow.
- Plop: So let's think about that observation. You said that there is water dripping on us. Is it just water? Pure water? Or could there be other materials in it?
- Drop: I assumed it was pure water, but let me think about it. I see folks walking through our cave with sodas and lemonade and stuff like that. Those things look like water but they must have other stuff dissolved in it to make them taste different. So I guess there could be other things dissolved in our drips. Why would that be important?
- Plop: We'll get to that, but let's first talk about some other observations that you have made.
- Drop: Most of the time the stalactites, that grow down from the ceiling, are right above stalagmites that grow up from the floor. I have even seen them grow together to make one long column. Is that an important thing to see?
- Plop: All observations are good. As we put together our ideas of how this system works, we will see what observations seem to be the most relevant and what observations might not be associated with the process.
- Drop: Based on my observations and what information you have given me, it seems like there is something in the water that gets deposited on us when the drips hit us. That substance in the water is deposited on us and makes us grow.
- Plop: But, based on my years of careful observation, that is the conclusion that I have come to as well. My next question to you is "What is the substance that is in the water that gets deposited on us?"
- Drop: Well, where does the water that drips on us come from? Since it always drips from above us I would guess, based on my observations of course, that the water is percolating down through the rocks above us until it comes to our cave. So that water is probably picking up stuff, maybe minerals, from the rock it is traveling through.
- Plop: And then when it hits us some of the minerals come out of the water and get deposited on us.
- Drop: On the stalactites it gets deposited at the tip of the point hanging down. Then it drips down from them and lands on us. As it runs on us some more of the minerals are deposited. Slowly we get bigger as more thin layers are added.

Plop: Good explanation. Have you seen anything else that might reinforce that idea?

Drop: According to my explanation, we grow one thin layer at a time as the water runs over us. What could I have observed to support that? Oh, I know, sometimes one of the stalactites breaks off of the ceiling. That lets us see their insides. I have seen them and they look like a bunch of concentric circles, like tree rings. That is how I would suppose it should be if we grow little by little, one layer at a time, as the water runs over us.

Plop: Great! So what we have now is an idea about how we form based on our observations.

Drop: Yes we do. Water seeps down through the rocks above us picking up minerals as it moves through.

Plop: As it drips down through cracks into our cave, the water loses its ability to hang on to those minerals and they are deposited.

Drop: Those deposits are what form us!

Plop: So how do you feel about those dripping sounds now?

Drop: I love them! They are our life-giving drips! At least I love the thought of them. I suspect that from time to time the sound may make me crazy, but I think that my attitude toward them will be different.

Plop: Like I said when we started this little conversation...just tune it out.

Drop: Maybe I can get some headphones. I tried them once before but my head is so pointy they kept slipping off.

Author - Amy Schiebel