Wait what? They talk?

What is language? Is it communication? Is it the expression of one's thoughts in a manner that another can understand it? Does it have to do with repeated sounds that convey a message? It would be great to say that we have a solid agreed upon definition of what constitutes language, but to be frank we really don't. If you asked twenty people you would probably get twenty different answers, likely somewhere on this scale.

Language can run the spectrum from English to Mandarin and from the to American Sign Language, they can be spoken written or gestured. these are all very different in many aspects, but they are all expected to be language. We have the ability to recognize, even when we don't know the words, that the speaker is in fact speaking.

This is not the case when we hear a dog's bark or a cat's meow. We assume there is some meaning behind these exclamations, but we don't understand what if anything is being communicated. This brings us to the research of Con Slobodchikoff, an emeritus professor of biology at Northern Arizona University, he has more than thirty years of research on prairie dog language. As he began to observe natural undisturbed colonies of prairie dogs he found that they have different call sounds for different predators, such as a hawk or coyote. But that was just the beginning, he found a large variance in the calls in each class. As he dug into these sound files and conducted more observations and experiments he found what appear to be possible variations for size, speed, shape, and color. For Slobodchikoff this was it "Prairie-dog

communication is so complex, so expressive and rich in information, that it constitutes nothing less than language". While this is enough for Slobodchikoff the consensus of scientists is at least split, his work has attracted many critics who are taking his work with a grain of salt. Julia Fischer of the German Primate Center in Göttingen says "The statistical approach he uses can be treacherous. It tends to pick up patterns that might not be there. If you redo his analysis with modern techniques, I'm not sure how strong it would be.". This set of contrary positions leaves us still with questions as to the validity of this evidence as a support for the claim of language.

In that vein, we can take a look at some different categories that we agree are in the language that we already understand as frames of reference to compare what we know of the prairie dog language, those are the three levels of language that we have talked about in class: descriptive, normative and prescriptive. The variations examined in this research are size, speed, shape, and color, when compared to our list from the class we find some interesting things about the supposed language of these prairie dogs. First, we'll look at descriptive language; which our professor defined as "Claims we make about the world that lend themselves to some quantitative measure or direct observation". According to this definition, the labels that we see in the alarms of the prairie dogs could be labeled as direct observations of the world around them. But it seems like a bit of a stretch to claim this as an example of a language, given that those observations are the only thing being offered in their speech. Second normative claims which are simply defined as "Claims of value", this one is tricky because it may seen that there is no value judgment happening but size and speed are easily quantifiable while color is a perception that will need to be judged out, while shape is again a different kind of value judgment is this a hawk or covote, so all in all this one is an overall sign of a significant amount of at least pattern recognition and

probably a fair bit of perception. Finally prescriptive language, which is defined as "Expressions that call for some action; giving commands, advice, guidance, directions, issuing warnings". In this again we meet minimum criteria, the whole process is a call to action. The problem is that it is not specified in any tangible way. They seem to be saying that 'this thing is approaching' but that's as far as it goes, they are not sending different members to different places. There are no orders, they just follow their instinct concerning that particular predator that they have been alerted to the presence of.

Looking at the evidence provided there nothing concrete. People are able to look at data and see whatever they want to see if they look long enough and run enough tests, eventually, you will see the results that you want to see. On the other hand, you can do the opposite just as easy, if not easier, by saying that this can not be. Either way, you limit your opportunities. This line of investigation is very interesting and should be continued. If you consider the ramifications of a discovery like that it seems like a must, but we need to be careful in our approach that we are not looking for miracles while also being open to the possibilities that there may be something out there that we don't understand.