Paper #1 Critique

This paper that we had to read first this week is written by Noam Chompsky, a famous scholar, but not necessarily a computer scientist, so this paper will not be very technical based. This paper tries to strengthen ties between faculty of language in the narrow sense versus the broad sense.

I found the part of the essay about the differences between vocal imitation and learning. Certain animals have the ability to only imitate but don’t really know how to understand language or learning a language. These animals include dolphins and birds, and some parrots can imitate huge amounts of languages and sounds, but have minimal capacity to learn what these noises actually associate. On the other hand, certain other animals have the ability to learn complex languages and make hand signs, but do not have the vocal capabilities to make human noises. This is an interesting change, because humans seem to have the best of both worlds, the ability to make large ranges of noises and also the ability to make huge jumps in learning ability, especially early in life. It’s a startling comparison when you consider that an average high school graduate can remember 60,000 words at a time.

The other interesting thing is that species develop in parallel and can have many things in common, up to over 99 percent of their genomic code in common, but never have any language abilities in common. Not a single species of animal has the same language, which is very interesting to think about. It is amazing that through all of the years of evolution, it would make sense that certain species would develop over time into having a common shared knowledge of language. The debate currently develops over whether or not animals other than humans have a keen sense of self awareness, and the consensus is that they cannot tell for sure yet, but in my mind it is pretty clear that if monkeys can solve complex problems and learn complicated languages, they must not be too far off at the very least from realizing that they have a self image.

If we look at it on a computer level, we can use the integer image and see that humans have the abilities of a basic computer in many ways and can do recursive calculations and figure out basic math, something apes can not get their heads around at this time. Interestingly enough, these animals which can learn do have a very sort of primitive language which consists of alarm screams, howls, mating calls and other noises that represent various necessities which animals need to communicate to better do. This is interesting to consider and the paper concludes that faculty differences will be shared between almost all animals.
Paper #2 Critique

This paper is called Social Catalysts and discusses an interesting theory of going beyond face to face and using things such as cue variety and feedback to understand your conversations at an even deeper level. I like this idea, and think there could be very interesting implications for this when applying it to the real world. For example, people that are deaf could find this kind of data very useful and also for chat based interfaces this could certainly be useful. For example, if people are using AOL chat, or Aim as it is more commonly known, being able to speak their words into the computer could be very interesting and might make things that are currently hard to discern much more visible. If someone uses sarcasm often, or even if they do not, a computer that could tell when someone was using a sarcastic tone could make IMing and texting much less confusing and probably solve many confusion issues that currently prevail.

I do find that certain interfaces, such as those which are visible to the user as they are using them, are not very much to my liking. I feel that when people can see they screen and they display, they are much more likely to mess around and try to break the interface and test its limits. I prefer to consider projects which cannot be seen while they are running because even if people are notified that they are being watched, they will act much more normally than they would if they know they are being observed and can also see exactly what they look like on the display. This is the same reason why people feel that they act one way, but hate hearing themselves on tape, or watching themselves act on screen. It is different to think about what is actually happening because not everyone has a great sense of what they are really doing. This is kind of an abstract way of thinking about it, but people do not have as much control over their body as they think, and so when presented with interfaces like this, they want to play with them and see what they are really being portrayed as.

As Karrie says in her paper, these cues are not always properly transmitted and things like dropped frames and audio glitches which seem like bad things at first thought, can actually turn out to be good things because a lack of synchonicity is what lets people be more comfortable with their image and gives an all important level of abstraction to the piece and all of a sudden the user or subject is dealing with a fun and interesting art piece, not a disturbingly inaccurate image of themselves. The important thing is now to make sure that the abstraction is not something that the user can change too much or they will be tempted to play with the machine, but instead you must aim for a type of visualization that you cannot manipulate without changing the entire conversation and defeating the purpose of the conversation in the first place.
This third paper is one which was an online article, one written on the economist and which discusses the maximum size of a social network on a site like Facebook and Twitter. The important things to notice are that most importantly, your friends and social network in real life are not at all the same as the social network that we find on social networking sites. For example, many of my facebook friends might be friends of friends that I have only met once or twice and would never really consider my friends. In addition, people who are not online very much may not even be part of your facebook network but are a huge part of your offline life. For example, I know that not a single one of my family members who is older than 24 is on facebook, or at least is not friends with me, and I have friends that are my age which I definitely consider my real life friends but refuse to submit to the restraints of facebook, and so are not considered part of my social network. This is why I believe that studies such as this are pretty stupid and do not really show any conclusive data about social networks that we do not already know.

Papers in the past have shown that most people have a core group of friends that are frequently contacted, and then a larger core of people they kind of keep up with and beyond that a larger group of people that they know even less and so on. This is still the case even in the case of facebook and twitter, because even though you might be reminded of older forgotten friends once in a while, they are either moving in or out of your social circle and therefore not changing the general scheme of the social scene. Dunbar’s number is interesting and probably close to true in that I can name around 150 people who I consider close enough to recognize and think I might be friends with, and anything more than that would be considered at best acquaintances. The argument that I dislike is that this number could not be higher, because I feel that an especially social person should be able to move every year or two and find a whole new circle of friends who are unconnected but still growing and I think this should disprove Dunbar’s theory pretty quickly.

This paper does not really work to prove anything important, if anything at all. They provide a number for social size and then agree that this method is not at all certain and in conclusion agree with all the years of studies saying that yes, people have small social circles. The only thing that is stated that could be considered new is that they fact of the network being social does not have anything to do with being online or offline, but the circle will always be the same size.
Paper #4 Critique

This paper is a response to the Economist article and hosted by Facebook, so the study was ran by people working at Facebook. This could introduce a slight bias, since they want to prove that people can get some sort of value from Facebook and people should not leave to go to a better site, although it is debatable if this would even be necessary since so many million people are currently using (and some would argue unhealthily addicted to) Facebook that they could probably agree to steal peoples personal data and no one would really mind that much.

The first thing that jumps out at me from this page is that the graphs given in the article seems to agree with all of the other data, and show that no matter the social size, there is a core group of people which you will always talk to more. This is interesting because it shows that within a group of 50 people, or even within a group of many more, up to ten times as many people in the social circle, there is always a proportional number of friends in the inner circle.

The second diagram, which also did not make into the economist article, shows an increasing amount of people in each category as the network size increases, but the rate is logarithmic, not linear. The final result is a number showing that as you increase the number of people in your network, you engage only one half as many people actively as you would have passively. This is most likely to keep the number closer to a set value, which could be approaching a Dunbar-like value over time, but much more complex mathematics are needed to prove or show this.

This is where Facebook is interesting though, and why things such as the newsfeed are so popular now. When first introduced, people balked at the idea and called Facebook creepbook, but now that people are used to it, no one would know how to use Facebook if it looked like it did back in the day. Newsfeed allows you to keep some sort of indirect contact with people you never would have talked to otherwise, and they don’t know about it, so it doesn’t feel creepy for either person. They are posting news about their lives and you are simply reading it like a news report. This is the breakthrough that really catapults Facebook above all other social sites and their willingness to look ahead and see the future of social networking and break some rules along the way has now set the boundaries much higher and has certainly changed the internet forever.