35 Years of CogFog
1979 – 2014
Setting the stage...what else was going on in 1979?

- The first Muppet Movie came out!
- *Kramer vs. Kramer* won Best Picture
- The most popular names were Jennifer and Michael (some things don’t change)
- None of the current grad students had been born yet
From the Home Office on the Seventh Floor...
THE TOP 10 THOUGHTS THAT GO THROUGH A STUDENT’S MIND WHEN PRESENTING RESEARCH AT COGFOG

10. Maybe if I sit here real quietly, they will chat away the first hour of my talk
9. Maybe this time I’ll get past the first transparency (slide) before 10:00
8. Uh-oh! Bobbie is making THAT face again
7. Uh-oh! Tom is making THAT face again
6. OK, I have to keep this straight: POINT at the SCREEN, WRITE on the TRANSPARENCY
5. No one but Elizabeth can point out the fatal flaw in an experiment in such a pleasant tone of voice
4. Whew!!! Tom’s nodding. I must have conducted the right analysis.
3. If I pause long enough, maybe Bob will answer that question for me.
2. Can I get a word in?

And the Number 1 thought that goes through a student’s mind when presenting research at CogFog is...

WHEN DO I GET TO EAT?

11/2/95
Written (and experienced) by Laura Da Costa and Wendy Francis
CogFog Terminology

**Academic Crowd Control** – coined by Mike Anderson to describe that unique training feature of CogFog
CogFog Terminology

• Bill Banks’s Method—way of presenting transparencies in which the speaker holds the transparency up to the screen so that the light shines on it
CogFog Terminology

• **CogFog Log** – a log at Disneyland’s Splash Mountain filled only with CogFog members
CogFog Terminology

- **Low-level Comment** – any comment that has nothing to do with the research but does deal with minor details of the presentation. For example, “Have you ever heard of something called APA style?”
CogFog Terminology

• **McOverhead** – any overhead transparency drawn within **moments** of when the speaker begins his/her talk
CogFog Terminology

Minifog – the CogFog equivalent for undergraduates
CogFog Terminology

Paranoia Room – Franz 7626B, the mysterious, small, off-master room near the chalkboard in CogFog

(More recently—John Nestojko’s and Veronica Yan’s office)
CogFog Terminology

Purulent, Pustulant, or Pustular Donut – any jelly- or cream-filled donut
CogFog Terminology

Thermostat – a very complicated, multifaceted, experimental design or model
CogFog Terminology

**Todd’s Limb** – to make a prediction that is really wild (named after Todd Gross who, when making predictions, would like to go way out on his own personal limb)
CogFog Battle Cries

“Who’s bringing the donuts?”

“What was the subject’s task?!?”

“Point at the screen, not at the projector.”

“The data are”
CogFog Pearls

“Do I remember something about that?”
Robert A. Bjork to Catherine O. Fritz
CogFog Pearls

“It is not that I have proved that nothing is going on, but it is certainly clear that there is no evidence that something is going on.”

John S. Shaw (4.23.94)
CogFog Pearls

“Given that if it had showed up you would be talking about it, it’s not quite fair to say that your dissertation wasn’t designed to look at it.”
Thomas D. Wickens (4.23.94)
Tom Wickens
1942 - 2012
Some Wickensisms

• “Life is too short and experimenters too anxious.” –5/5/89
• “This project is a prime example of ‘stalking the Type I error.’”
• “This project demonstrates the ‘tyranny of the factorial design.’”
• “In fact, the world doesn’t throw us the same pitch all of the time.” –7/10/92 re: a study in which three types of pitches were thrown to batters in either a blocked or random practice schedule
• “That does fit my rule of ‘leap out and stick a thumb in your eye’ as far as variance is concerned.”
More Wickensisms

• “You’re out on the slender edge of a rat’s nest.”
• “A post-hoc planned-interaction test might be reasonable there.” –6/6/94
• “Predictions regarding variance are never obvious.”
• “At least literally as far as the metaphor goes.” –10/27/95
• “Just because the conditions interact doesn’t mean you can collapse across them to make things simpler. Otherwise you might as well just find the Grand Mean and the Hell with it.” –11/3/95
More Wickensisms

• A concept is a “conceptually difficult thing to conceive of”—1/12/96
• “If you take two sigmoids and glue them together you get a humpy thing and that looks like a Gaussian”—3/1/96
• “If you take it on the road, the fuel tank will explode”—3/1/96
• “Jiffy-plot-fits-all program”—5/10/96
• “Change hobby horse in midstream”—5/10/96
• “Knock-kneed hypothesis”—10/29/99
• “You need to pray that the next 24 subjects come charging in to sweep away the forces of randomness.”—11/12/99 re: the results from the first 48 of 72 Ss
• “God didn't create interactions. They're something we foist off on ourselves.”—11/12/99
Tom’s Advice for Research Design & Analysis (courtesy of Catherine Fritz)

• There is an answer.
  – The goal is often to understand the question.

• Keep things simple.
  – Simpler procedures are usually better—especially with respect to statistics—and are easier to communicate.

• Understand what you’re looking for.
  – Don’t carry baggage that you don’t need. Think about where the variability is likely to occur. For example, if interactions are not of interest, then two one-way designs may be a better option than a two-way design.
Tom’s Advice for Research Design & Analysis (courtesy of Catherine Fritz)

• Have clear questions.
  – Define what you’re looking for specifically and clearly – or all of the data in the world won’t answer your questions. The questions should dictate the design – not the other way around. There are three levels of questions:
    1. Three to four specific questions that will come out of the study – Is A > B? Does A correlate with B?
    2. Slightly broader questions – Relations, etc. that you want to examine
    3. Data-drive, post-hoc questions – See if the data tell or suggest anything else
Tom’s Advice for Research Design & Analysis (courtesy of Catherine Fritz)

• You get out of an analysis what you put into it.
  – *The more you are willing to assume about the data, the more the data can tell you. Assumptions are always required, but they may limit generalizability.*

• Live with your data.
  – You need to ‘wallow’ in the data to get a feel for it. Enter the data – graph it in various ways, and so forth.
  – *The data may suggest things post-hoc; they may suggest ways to improve the study.*
  – Explain your data to some poor slob – preparing a presentation is often a good way to notice things about your data – both problematic and fortuitous.
Tom’s Advice for Research Design & Analysis (courtesy of Catherine Fritz)

• Don’t expect miracles.
  – Data analysis cannot do many things. There are limits on what data analysis or experiments can show. There is always variability, so there will be some fuzziness. Thoughtful design will identify areas of high-variability and low-power so that you can compensate in the design before running the study.
  – Use common sense. Don’t expect statistics to fix things after you’ve run the experiment. Statistical fixes (such as transformations) are dangerous because they add assumptions (e.g., linearity) and create problems with reporting.
  – Before conducting the research, test your research design like software. Try to break it. Find faults with it. Ask others to do the same. Then try to fix the problems at the design stage rather than at the analysis stage.
CogFog Memories
“I believe the name Cogfog started when I mentioned to Charlie during a class that I was having such trouble following the lecture that I was ‘in a cogfog.’ I can’t remember whose class it was, though—maybe a case of selective forgetting.”

-Michael Burns
“The meetings created a wonderful environment for creative, collaborative thinking. They also gave us grad students a chance to develop our presentation skills in a friendly, non-threatening environment. They gave our lab group a sense of identity and served as a group bonding experience. Through the years since then, I have been in lots of different groups where we have weekly meetings to discuss current work-related topics, but none of these meeting groups ever has come close to duplicating the spirit of Cogfog. I have been lucky enough to be able to return to UCLA and attend Cogfog meetings several times since graduating. Those meetings have always been a highlight of my trips back to LA.”

-Michael Burns
“For some reason I remember Elizabeth recalling the dismay she felt when she discovered that the song ‘On Wisconsin’ was not actually ‘On Weewaukee.’ It sticks out in my mind because there was a pause, and someone said, ‘you mean it’s not ‘On Weewakee?’”

“I remember Bob describing a factorial experiment that Art Woodward had looked at. It involved mean and nasty things which were done to mice. Let’s just say that the mouse in the 1,1,1,1 cell did not fare too well.”

-Charles Hofacker
“One thing I really used to enjoy was tabulating data with Bob. We never just jumped into counting stuff. Sometimes we would spend about as much time figuring out the optimal way to do it as we did actually doing it. We would have these great tables west up with symbols which Bob invented expressly for just the current experiment.”

“It’s funny how sometimes the stuff on your transcripts almost ends up being the least most important part of what you take away from a place. I think that what I know think of as my scientific or academic worldview began to take shape over donuts on Friday mornings in the late 70’s.”

-Charles Hofacker
“New students will undoubtedly laugh to know what it was like programming a computer to do lab studies back then. Tom Wickens showed me how to write an assembler program for the lab ‘Sol’ microprocessor. It captured reaction time. One way we had to save the program was by storing the entire memory on a music cassette tape player. About five years ago I was in the Smithsonian in Washington, DC when darned if I didn’t see a Sol on display for historical purposes.”

-Charles Hofacker
“I think that the cog fog I remember best was when Ron Fisher came in, having just talked to the LAPD about methods that he and Ed Geiselman were working on to improve memory. He was, of course, talking through his hat and we all hooted him down, and predicted his impending humiliation. This, of course, because a wonderful research program.”

“Ron and I also had beer bets on classification (I think we were able to milk this for beers both ways, many times over—-but that was just normal—or as we were trained to say by Bob ‘par for the course.’”

-Janet Metcalfe
“Bob was heavily into pinball and ice cream at Kerchoff, but that wasn’t during Cogfog sessions. These educational experiences generally occurred toward the end of the day. Mike Burns started calling Bob ‘The Father Figure’ and eventually we all referred to him as such.”

-Francois Christen
“I did pass the Ebbinghaus memorial chair to Mike Burns after my final oral. I had appropriated the chair from some faculty office. It was a rather comfortable swiveling office chair and I felt that it was appropriate for the most senior graduate student in the seventh floor lab to use it. Much to my chagrin I later discovered that the chair somehow was reclaimed by the administration. I suppose Ebbinghaus is turning in his grave.”

-Francois Christen
“The 1980-1982 group frequently went out to lunch and for coffee/ice cream breaks at Kerchoff. On one of those occasions, I remember sitting with Mike Burns and Bob Bjork, discussing Mike’s future. He had an interview with Bell labs, and just couldn’t get used to the idea of wearing a TIE everyday! Mike was also dating his future wife at the time, and just couldn’t get used to the idea of marrying her! My, how things change! (He visited with Wendy and his new baby sometime in 1988-1990). I remember that Alan Richardson seemed rather uncomfortable with American culture, especially back in 1982. When I returned in 1988 and served as his teaching assistant, he would show up in shorts! Still, he never adapted completely, and refused to go to Disneyland… right up to the end.”

-Carla Chandler
“Isn’t it funny? At the time EVERYTHING seemed so memorable. We all thought we KNEW each other so well—especially the classic lines that each person would say. But my mind has clearly been erased. I don’t remember how Mike [Anderson] used to show up late for everyone’s talks—including his own. I don’t remember Todd’s McOverheads or how, when we asked for predictions, he would say ‘I’ll go out on a limb…’ I don’t remember how Tom used to clasp his elbow in his other hand and point his finger up in the air to get recognized to speak... And I don’t remember when the majority sentiment switched from chocolate chip donuts (yay) to cinnamon-raisin-bagels-with-strawberry-cream-cheese (ach, goyim)...I DO remember donut day anxiety—having dreams that it would be my turn to get the donuts but I forgot; pasting notes to myself all over my apartment and setting two alarm clocks so I wouldn’t forget.”

-Bobbie Spellman
Oh yes, Stan’s Donuts...
***DOUGHNUT COMMANDMENTS***

Set down on the seventeenth day of September, in the year of our Lord, Nineteen Hundred Seventy Nine

- Shall not be purchased more than 52 minutes prior to arrival at 7456 Franz Hall
- Arrival shall be between 8:15 and 8:35 A.M. on the appointed day
- One dozen, lower bound, excluding doughnut holes.
- Composition is at discretion with the exception that at least 40% must be glazed raised
- Must have significant sin value, and must in total have very little food value per calorie
- Non-doughnut (home-baked items, bagels, etc.) can only be brought every other time by any one individual
“All I remember is that the doughnuts had to come from Stan’s or else you would be kicked out. But then Tom W. started bringing croissants, and then he even brought SUSHI!”

-Cynthia Yelvington
“I remember it all very fondly, though I still have a mild case of indigestion from all of the donuts that I consumed in the name of science.”

-Eric Eich
“Things I remember most? Wow! I remember the donuts. I still am amazed at how particular everyone was about their donut needs. In the real world, when people get donuts they just go into a donut shop and order whatever types move them at the time...but not cogfog people. ‘White icing, but not too much, on a cake donut with colored sprinkles, but make sure there are no orange-colored sprinkles.’ (Well, that might be a bit of an exaggeration.)”

-Karl Oswald
“The Bob donut—cake donut with chocolate frosting and nuts (NOT devil’s food). The cruller with pink frosting was always left uneaten, that is until Anthony Wagoner joined the group.”

“The donut day anxiety on those days in which a person had to remember to bring the food. Even the donut day nightmares. Bobbie Spellman had the classic in which she realized that she had forgotten to buy donuts so she paid an exorbitant amount of money at Disneyland to buy some, and then rushed to Cogfog only to discover that she had forgotten that she was the speaker that day.

-Karl Oswald
“I remember giving several talks, having to buy croissants, going out as a group to some gourmet hamburger place, and getting great feedback on my research.”

-Jim Nairne
“I think my most memorable trips with Cogfog were to Cassell’s to eat burgers. I still miss that a lot, together with all the other wonderful restaurants that Greta and I used to go to in LA. Good Mexican food is especially lacking over here [Britain].”

-Alan Richardson
“Best wishes...to all present and past Cogfoggers. Experience after my time in Cogfog has told me that Cogfog is one of the best research groups one could be a member of, partly owing to the disciplined and lengthy meetings, and the unique combination of interests and expertise of the people who attend. Being a member was certainly one of the most important parts of my learning experience at UCLA.”

-Alan Richardson
More memories...

Uh...**Andrea Halpern**, for the millionth time, “Where is Bucknell?”
More memories...

Three trips to Disneyland, two to Dodger Stadium, and two to Hollywood Park. Dinners at Cassels and Versailles.
Nov. 12th, 1994  The presentation of the Stanford regalia to Robert Bjork at Psychonomics in St. Louis. It was a gift arranged by Bobbie Spellman and Elizabeth Bjork from, primarily, Cogfoggers past and present. Much to the amazement of all involved not only did we surprise Bob, but he also appeared to be speechless for a whole 15 seconds.
“This is 1992 or 1993. Over the previous weeks a couple of presenters had used fairly complex experimental designs and had, with clearly uneven success, tried to represent those graphically. For his presentation, I think it was Todd Gross (or Michael Anderson?) who, jokingly, showed something like the image you will find attached to this message and presented it as his design. Something clearly too complex for us to grab. Everyone laughed. But when Todd was about to continue his presentation, Tom Wickens said gleefully "that's a thermostat, isn't it"? Yes it was. And Tom explained that as a kid he was into electronics.

That's my most vivid memory of Cogfog. A long time ago now. How there was this mix of rigor and fun. Occasional sparks of insight. And on this occasion the recognition that Tom as well had been this kid that always tried to figure things out by himself.

-Marc Vanhuele
Organizing CogFog

“That summer Mike tried to organize things was very funny in that it was the only time he ever appeared at CogFog on time! But the ‘incomparable Laura D.’ was the person who kept it together and running smoothly while I was there.”

-Catherine Fritz

_Rejoinder from Mike_: “I object to that, Catherine! I’m pretty sure I did not show up on time for that, either... We had a name for that summer: The ‘Summer Festival on Implicit Learning’... and festive, it was.”
CogFog in Texas

“Having attended pre-Cog-Fog brownbags at Michigan, and Cog Fog meetings in 2005-6, I initiated Cognoscenti at Texas A&M University. It just isn't the same without Bob and Elizabeth, though. In Cognoscenti, everyone finishes their PowerPoints. In Cog Fog, we never got past the second slide!”

-Steve Smith
CogFog in Chicago

“I held my lab meetings at 9am Fridays during this last winter based on fond memories, but I did get some serious resistance when I suggested continuing the tradition (partly fueled, I’m sure, by the lack of a good donut shop or bagel shop nearby)! But, despite that setback, the good news is there is now a Stan’s Donuts in Chicago. The bad news is that it is very far north of the University. What were they thinking?!”

-Lindsey Richland
CogFog in Canada

“I was first introduced/indoctrinated into Cogfog tradition as a grad student in Toronto, when Aaron Benjamin began to lead our lab meetings, with his attempt to implement many of the rules and rituals of the Cogfog in which he grew up (saying Aaron grew up sounds pretty funny). Instead of Stan’s donuts, we usually had Tim Horton’s donuts, and getting polite/buttoned-up Canadians to constantly interrupt each other took some getting used to, but Aaron was truly a leader, and we became good friends. Little did I know that my future would hold the ‘real’ Cogfog experience, complete with Stan’s donuts, when I came to UCLA in 2006, and it did not disappoint. Bob, Elizabeth, and all the other members, speakers, visitors, and guests of Cogfog have played an important role in my own development, and I want to thank Bob and Elizabeth for their guidance and friendship. I doubt I have successfully implemented the Cogfog rules in my own lab meetings, except perhaps for the encouraged and constant interruptions that more often than not lead to interesting paths and directions (and longer meetings). Like a big family gathering, the Cogfog traditions of interruptions, critical encouragement, and interesting/sometimes tangential questions, makes for a truly unique forum, and certainly one that has led to lots of memories.”

-Alan Castel
Showing the love

Bagels vs. Donuts

White Elephant Party
What’s so special about CogFog?

“Bob Bjork does good research. And he attracts smart students who are also good people. You should apply to UCLA.”

-Prof. David G. Elmes to Mike Burns, 1976

“While Dr. Elmes was speaking about Bob in the quote above, the same could be said for Elizabeth and Tom Wickens. The success and longevity of Cogfog is a testament to the leadership of those three guiding lights over the years. It has been a privilege to be a part of Cogfog from its beginnings.”

-Mike Burns, 2014
Important Lunch Information!

11:30am in the Sierra Room in the Faculty Center.
Start at the donut and end at the hamburger.
Walk in...
Get your ticket at the desk on the left.
Then turn right and go through the doors...
Then walk across the room and go down this hallway...
Past some photographs...then go in this door
Get your food...
Then go back the way you came

Desk where you got your ticket is over here

You got your food from over here
Go all the way down the hall...
At the end of the hall on the left, you will find the Sierra Room!
It will look like this, with more tables.

😊