# Digital Anthropology

Project Proposals
7 March 2003

**Realtime Classroom Feedback – Opinionmetrics ~ *Boris, Marc, Lionel***
Use Zauri in classroom setting. Learning is from each other is critical. We'd like to see instant feedback on what's being said, on the quality of comments. Aggregate anonymous real-time ratings. What kind of feedback? Can't be complicated but should be worthy. Sandy e.g. a distribution of comments graphically. Possibly correlate this with GSR – Galvanic Skin Response – correlates with physical activity or emotional arousal. This way can get a good idea about emotional state. Also correlate with rate of speech, possibly emphasis of speech. Also could look at feedback for instructor, e.g. move faster, go slower. How large a test population? Everyone in class. Perhaps one of the "soft" classes, e.g. OP or marketing. How about *Designing & Leading the Entrepreneuial Organization*? ~30 students. Tim's informal version of this in Summer 2002 – spent a day recording who spoke when. Then he told everyone who hogged the class floor;-) Sandy suggests simple mechanisms to manipulate the audio, e.g. amplification, delay, auto-distribution of speaking time. Another benefit to the professor is tangible metric about participation, instead of merely subjective recall or simplistic quantification. This is nicely focused, limited in scope, with lots of room for extension (or the intervention side).

Summary Query: How much did each person participate & what did people think of what you said.

**CoachWear / WhisperWear -- Presentor / Negotiator Reflection ~ *Michael***
Targeting the *Communications* class where students repeatedly practice presentations. TA's are already interested, as are a few students. Two categories of ideas: (a) Feedback Afterwards for Later Review; (b) Dynamic, Real-Time Feedback.

(a) After -- Measure HR, synchronize with video recording. GSR (Galvanic Skin Response) too. Record student comments. Possibly use Selker et al's EyeAre (sp?) for assessing viewer attention.

(b) During – HR, help people "self-calm" or increase self-comfort. This harkens to the gameshow where the try to shock you and you try to maintain calm (as measured by avg HR). This is a form of bio-feedback. Another variant is WhisperWear – live coaching via an earpiece from the professor-coach who's in the audience. (This is used by network anchors, politicians, etc.) This might also have use in entrepreneurial presentations.

Difficulties – Sometimes feedback boosts nervousness. Also, implicitly assuming calm = good. Sandy, for example, thrives on nervousness, stress, pressure.

Other Applications – Negotiation settings, e.g. Cirhan, Kaufman's classes on *Competitive Negotiation*. Both require feedback on how you feel, and your negotiating partners feel. But this is currently survey-based, retro-active, and subjective. Professor Kaufman is already quite quantitative. (He's a bit hard-core, capturing hard-data and grading you accordingly;-) Doing it in a REAL class is critical, very important. There's already at least one group in an existing class that's interesting in using technology to improve communications.

Platforms -- Sociometer captures a lot of this, e.g. recording audio. E.g. Rich who wears IR-transponder. With Zauri can stream audio & hints back'n'forth. Accelerometer & IR tagging allow sense of where facing. Possibly synching with videostream.

How compare those who use with those who don't?  Or could you better separate style from substance?  This is a bit fuzzy.  Are there things you measured which in retrospect correlate with grades?  MetaComment:  What's your way of knowing you did a good thing?  As a control, you might have some people who only get feedback later (or never?) or in the aggregate?  Difficulty of getting enough data…  Can you see pace of improvement???  Could do something simpler, like survey people about their opinions.  Nathan might ultimately do topic spotting as driver of real-time feedback.  Not trivial.

Summary Query:  ?


**Transcriptions-Driven Socio-Feedback ~ Tim, Federica**
Could better hone in on what phraseology really worked, possibly online?  Certainly online.  Do you really need transcript?  If you have interest-metric which spikes, you'd like to zip there and likely rapidly recall what worked.

Power of speakers notes.  Useful knowledge-transfer, or experience-transfer tool.

One theme here is that documentation is good and allows people to know more about what they did.  One caution here is pushing real-time feedback too much.  It's not only hard, but there are other difficulties.

What's the group aspect?  Hopefully, this shouldn't just be a personal training tool.  The Remembrance Agent comes to mind, what Rhodes & Starner did, sharing their memories.

Can one enhance productivity in group settings?  For example, when people are working on cases.  Transcription alone allows fast-first-drafts.  Especially with live ratings, most of this gets lost in current group settings.

Can we find one or couple groups who are willing to subject self to this repeatedly?  Are all opinions captured?

Core Theme:  Group-metrics plus transcription