

# Collaborations: Elaborations and Celebrations

March 21, 2005

Befitting the season (February 14 approaches as I write this), this column is a Valentine to collaborations. I want to share some general thoughts about collaborations and to take this opportunity to express my gratitude to two people I have collaborated with over many years, both of whom have recently retired from university life. I am also hoping that this column might spawn an Observer article or series on other lasting, durable, and productive collaborations in our field.

To John On Our 30th – To Paul on Our 25th

Recently John Gottman and I got together in San Francisco with family and friends to celebrate a milestone. Thirty years ago, when we were both on the faculty at Indiana University, we met and started a collaboration that has now spanned three decades. Throughout professional and personal lives that have seen great changes, this collaboration has been a constant. It is surely a lot different now than it was way back when, but it is still a source of pride, and it has spawned a rich set of memories, adventures, struggles, and accomplishments that made our recent gathering a wonderful occasion.

Paul Ekman and I will celebrate our 25th anniversary of collaboration next year. We started working together when I came to Paul's and Wally Friesen's Human Interaction Laboratory at the University of California, San Francisco on my first sabbatical. Weaving the two threads together, John Gottman was the matchmaker for this sabbatical. He knew us all separately and thought we'd really enjoy working together for a year. There may be something about having one of the world's most renowned experts on couples arrange your sabbatical. What was supposed to be a year's encounter morphed into a second long-term collaboration with its own wonderful set of memories, adventures, struggles, and accomplishments. Paul and I haven't talked about it yet, but I hope we'll have a celebratory event to mark our upcoming collaborative milestone, too.

You Complete Me (*apologies to J. Maguire*)

A successful collaboration should be greater than the sum of its parts. The ideal collaborator knows something that you don't know and vice versa. This creates an opportunity for combining strengths and for viewing research questions from differing perspectives. My most successful collaborations have been with people who have special gifts for measuring and making sense of complex behavior. John Gottman brought novel and powerful methods for studying emotional behavior during social interaction. Paul Ekman brought precise methods for measuring and understanding emotional expressive behavior in the face. Neurologist Bruce Miller, my most recent collaborator (now approaching five years), brought a remarkable ability to detect neuropathology from clinical histories and current behavior (plus vast knowledge about brain anatomy and function).

To all of these collaborations I brought expertise in measuring the activity of the autonomic nervous system and in relating this to higher level psychological constructs. There has been a huge amount of cross-fertilization in these collaborations, as we designed studies, collected and analyzed data, and tried to make sense of relations between emotional behavior and physiology. All of these collaborations were

characterized by a great deal of mutual respect and by gratitude to the other for making it possible to do research that could not have been done in isolation.

### Glorifying the Struggle

From the outside, collaborations often look rosy. However, by the time collaborations become well known to others, they probably have encountered and overcome many serious challenges and setbacks. Skepticism and rejection from funding agencies and journals dealing with new kinds of hybridized research are common. Navigating the minefield of sharing credit can be tricky when dealing with a range of situations from authorship order to deciding who gets quoted in the popular press. Inevitably, in collaborative research, compromises have to be made. The research design that is optimal for physiological measures can be quite different from that which is optimal for behavioral measures; findings from different kinds of data may point to very different conclusions. From our work studying successful long-term marriages, John Gottman and I learned that couples take pride in and derive confidence from the challenges they have faced together. The same is true of collaborations — what doesn't destroy you clearly makes you stronger.

### Collaborators Just Want to Have Fun (*apologies to C. Lauper*)

Good collaborations stimulate you to take chances and to have grand adventures. Without my collaborators, I would not have thought it possible to study naturalistic marital behavior in a psychophysiology laboratory, nor would I ever have thought it feasible to bring a wide range of dementia and lesion patients into the laboratory to study subtle (and not so subtle) changes in emotional functioning. Without my collaborators' chutzpah and prompting when we hit upon some interesting findings concerning the capacity of voluntary facial actions to initiate emotion, I would never have set off with Paul Ekman and anthropologist Karl Heider to study this phenomenon among the Minangkabau in West Sumatra. Looking back on these collaborations, I am struck by how much fun it all has been. I've been extremely fortunate to have collaborators whose scientific and personal humility has enabled us to laugh at our individual and collective foibles and miscues.

### From Mom-and-Pop to Big Business

My collaborations with John and Paul started out very small, with big questions but little funding, almost no infrastructure, and no graduate students or postdocs. In the early days, the work was essentially hand-crafted. I have vivid memories of running our own subjects, sitting together at the computer working on data, and marathon sessions spent co-writing articles and later grants. As the work became better known, grant funding was obtained, staff were hired, and extremely gifted graduate students and postdocs were drawn to the work. The pace of the research accelerated greatly, and we became less and less involved in the day-to-day work, with the small details, and with crafting the first drafts of papers. Funding and size are mixed blessings. For me, there is no question that grants make great things possible, but a lot of the work I feel best about was done on a shoestring.

### On That Park Bench Like Bookends (*apologies to P. Simon*)

Science can be quite solitary. Collaborations are one of the ways we make science into a more communal experience. For me, collaboration has always been closely associated with friendship — sometimes the friendship preceded the collaboration and sometimes it grew out of it. John Gottman and Paul Ekman are my oldest collaborators and two of my closest friends. Both have recently retired from their respective universities, but certainly not from doing science or from their fierce commitment to applying scientific findings to the amelioration of significant societal problems. I want to thank them

both for the science done, the science yet to come, and the friendship. Bring on that park bench — I'd be proud to sit on it like bookends with the two of you anytime.