Savannah in the Rearview Mirror,
LA in the Headlights

By Dan Cervone

As a great many of you know from first-hand experience, SPSP held its third annual convention in Savannah, Georgia, on Jan. 31—Feb. 2, 2002. The annual meeting of our group once again proved to be a great success, with memorable moments of science and collegiality extending from Claude Steele’s opening Presidential Symposium through the final clash of Mark Baldwin’s closing Jam Session.

Of particular note to the Society is our conference’s continued growth; 1327 people attended the conference in Savannah, our largest gathering ever. The meeting has grown substantially in each of the two years since our first conference—which itself drew far more people than anticipated.

A further sign of the vitality of our Society and our field is the conference’s demographics. Of the people in attendance in Savannah, more than half came from that group of individuals who provide so much of the energy and the new ideas of any scientific discipline: graduate students and postdocs. SPSP is committed to doing all it can, via registration discounts, travel awards, and diversity fund travel grants, to continue to make the conference attractive to our young scholars.

This moment of Savannah nostalgia is an apt time to thank Todd Heatherton for his service on the SPSP Convention Committee. Todd now leaves this committee assignment after years of work—since the very beginnings of the planning for our first convention. Through his efforts in establishing the conference, Todd has left an indelible mark on the fields of personality and social psychology.

This is also an apt moment to look ahead. If the SPSP meeting is the highlight of your year (what do you mean “Get a life”?), the good news is that you don’t (Continued on page 2)

New SPSP Fellows Named

The SPSP Fellows Committee meets each year to recommend members for Fellow Status in SPSP and/or Division 8 of APA. This year’s committee—Susan Andersen (Chair), Jennifer Crocker and Jeff Greenberg—recommended 14 stellar contributors to the field for this honor, and all were unanimously approved for Fellow Status in SPSP by the Executive Committee. These new SPSP Fellows are: Roy Baumeister, Bob Cialdini, Rick Gibbons, Tom Gilovich, Peter Gollwitzer, Jeff Greenberg, Bill Ickes, Ziva Kunda, Mario Mikulincer, Jamie Pennebaker, Janet Polivy, Tom Pyszczynski, Fritz Strack, and Dan Wegner. With the Executive Committee’s endorsement, the materials for those individuals who are members of Division 8 of APA have been forwarded to the Membership Committee of APA for its annual consideration of Fellow nominations. Congratulations to these individuals for their (overdue) designation as SPSP Fellows!
Psychology and Astrophysics: Overcoming Physics Envy

By R. Michael Furr

I am not an astrophysicist, but I have seen one on TV. A cable channel recently aired a program called “Supermassive Black Holes,” and sometimes even cable TV can get a person thinking…. What in the world (so to speak) do Black Holes have to do with social and personality psychology? A consideration of how astrophysicists conduct their research reveals some interesting parallels with psychology.

1. Unobservable constructs

Some key constructs in astrophysics are not directly observable but are instead inferred from the behavior of entities that can be observed. A classic example is gravity. As described in a recent introductory physics book (Seaborn, 1998), Galileo astutely noticed, among other things, that cannonballs tend to fall to earth. He conducted research to describe the relations between muzzle velocity, trajectory, and distance of cannonball flight. Later, Newton drew a parallel between the behavior of cannonballs, the behavior of the moon, and, as legend has it, the behavior of apples. From the behavior of such observable entities, Newton posited the existence of an unobservable force that he called “gravity” and eventually published a law of universal gravitation. So far, this idea has worked out pretty well.

A bit more recently, and a bit closer to intellectual home, MacCorquodale and Meehl (1948) noted the self-consciousness that psychologists seem to feel when daring to posit the existence of unobservable or hypothetical constructs, and they contrasted this with the apparent comfort felt by physicists. Of course, MacCorquodale and Meehl go on to point out that not all unobservable constructs are equal. Are gravity, black holes, short term memory, and the superego on equal scientific footing? Perhaps not. Nevertheless, to the degree that research finds, or even might find, physiological bases (or correlates) of constructs such as Memory, Intelligence, or Extraversion (e.g., Zuckerman, 1995), we might feel more and more confident in positing and defending the existence of such unobservable constructs.

2. Correlational research

Astrophysicists working with galaxies cannot do too many experimental manipulations, but they seem to get by. One astrophysicist interviewed on the “Supermassive” TV show proudly claimed that “what we do is to search for correlations.” The point here is that the underlying correlational methodology and analysis is the same as that used in some of the “softer” areas of psychology. What is odd, though, is that an undergraduate reading the typical textbook in psychological research methods could be forgiven for believing that “correlational” research is a second-class substitute for good experimental research.

Consider a recent investigation of the correlation between the mass of the black hole at the center of a galaxy and the average velocity of stars at the edge of the galaxy (Gebhardt et al., 2000). This correlational study has such crucial implications that some claim “it almost has the status of a new law of nature” (Musser, 2000). OK, so the correlation is .93, which is a bit larger than the effect sizes typically found in Psychology (by the way, it was statistically significant). Still, not bad for what sometimes comes across as a second-class methodology.

3. Error and aggregation in measurement

How does one obtain an accurate image of a star? One strategy that astrophysicists use is to take multiple pictures of the star and aggregate over pictures (e.g., Ghez, Morris, Becklin, Tanner, & Kremenek, 2000). Why? Because each single picture (i.e., item) is affected by error, such as atmospheric disturbances. By aggregating over the images, the random error washes out, leaving a nice clear image of the star itself. There are a variety of other sources of error and a corresponding variety of corrections that Astrophysicists use, but the basic logic of measurement error and aggregation could be straight from the discussion of reliability found in a typical psychometric textbook.

4. Concern over generalizability

This includes at least two issues that psychologists might recognize as random sampling and cohort effects. At least one astrophysicist has admitted the possibility that findings on which much of the science is based may be of limited generalizability. For example, Harwit (1998) states that the knowledge of large-scale dynamics is based on extrapolations made from research on our Solar System, and he suggests that there is “no guarantee that this extrapolation is warranted” (p. 9). Even more intriguing than this issue of “convenience sampling,” is a recent study that has been interpreted as showing that the very laws of nature might be changing as the universe ages (Webb et al., 2001). One might ponder the parallels between the study of “our Solar System as it appears in the year 2001” and the study of “American undergraduates in the year 2001.” In both cases, might one question the ability to generalize across “subjects” and time?

I hope that this brief survey of similarities will not be interpreted as another case of “physics envy.” Clearly, it omits the important and (Continued on page 21)
fundamental differences in the nature of research and the overall progress of the two sciences. Nevertheless, it is often useful to step back for a different perspective on what we do and how we do it. For myself, the more I learn about what other sciences do and the challenges that they face, the more I feel that we do quite well for ourselves.

References


