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In Pittsburgh Jim was not always a professor. He grew up in Aspinwall, a Pittsburgh suburb. His father worked at Mellon Institute (now part of Carnegie Mellon University) for PPG Industries, after earning an MS in Physics at University of Michigan. His mother earned a BS in Psychology from Michigan but never worked outside the home, though she was active in civic organizations. His younger brother is a Japanese-to-English translator, living in Tokyo since the early 1960s. His younger sister lives in Washington, DC.

By middle school, he was one of the “brains” although social categories were permeable in the small high school, with a graduating class of 100. He wanted to become a physicist and was active in science clubs, chess team, newspaper, and the rifle team. (His team won the state championship two years in a row.) At the Buhl Planetarium’s Amateur Astronomers Association, he hand-ground a 6” mirror for a reflector telescope. He bred *Drosophila melanogaster* (fruit flies) in his basement, to test Mendel’s laws. His mom regularly took the children to the Carnegie Museum and Library in Oakland. He took piano lessons for 4 years and spent hours listening to classical music (esp. Brahms and Franck) at the Carnegie Library. After Cub Scouts and Boy Scouts, he became an

Explorer, Eagle Scout and joined the Order of the Arrow. He won a prize in the Westinghouse Science Fair with a homemade planetarium, built a Heathkit hi-fi system (with vacuum tubes!), and bought his first LP, Stravinsky’s *The Rite of Spring*. In his senior year, he placed first in a tri-state academic competition. After a summer job as an assistant ditchdigger in construction, he won a National Merit Scholarship and became a freshman at Caltech in 1957.

From first grade onward, he had gotten 25¢ for every A, nothing for a B, and owed 25¢ for every C on his report card. During dinner, the talk over the table focused on achievement, cleaning your plate, and facts. Politics, values, and other domains not reducible to facts or economics (the National Association of Manufacturers’ version) seldom arose. Dating, other complex social relations, and emotions remained a mystery.

In Pasadena He majored in physics and had a good freshman year. Martin Luther King, Jr., visited his small humanities class, but being apolitical, he missed King’s significance. He almost flunked out in his sophomore year. Unmoored from adolescent motivational certainties, surrounded by very smart but diverse all-male classmates, and exposed to the temptations of life in Ricketts House, he lost his naïve, straight-and-narrow ways. Richard Feynman’s pranks and Linus Pauling’s unconventional views expanded his concept of reasonable role models.

Abraham Maslow delivered a series of guest lectures on self-actualization. Maslow stayed in a dorm suite down the hall from Jim, and his roommate invited him over for scotch. Conversation went on until 3 a.m. Folk songs at the Ash Grove in LA, O'Neill's *Long Day's Journey Into Night*, and Bartok's *Music for Strings, Percussion, and Celeste* by the LA Symphony Orchestra enriched and stirred his emotional life. The campus counseling center was little help. Jim flunked two quarters of abstract algebra. It was time to switch schools and majors. Maslow's example suggested that psychology could combine science and humanity. So he applied to five schools and only got into Michigan.

In Ann Arbor Jim lived in West Quad, had weekly "ego support" therapy, and worked to complete a psych major. But he could not ignore such campus events as teach-ins on racism in the North, picketing Woolworth's, and the political ferment that produced Students for a Democratic Society (SDS). He moved off campus his senior year and roomed with four liberals from Chicago. Being the only one in his apartment old enough to vote in the Nixon-Kennedy election of 1960, his roommates persuaded him to abandon his republican roots.

In the summer of 1960, he was a counselor at Michigan's Fresh Air Camp for emotionally disturbed children, run by Elton McNeil and Dave Wineman (Redl and Wineman 1957). Then he entered the honors program in psych. Jim McConnell (*The Worm Runner's Digest*) taught honors and asked students for brief reports on three books of their choice. Jim's were Hebb's (1949) *The Organization of Behavior*, Shannon and Weaver's (1949) *The Mathematical Theory of Communication*, and Dollard and Miller's (1950) *Personality and Psychotherapy*. He met his future wife. After graduation in 1961, he got a summer job at the Mental Health Research Institute with Len Uhr and Charlie Vossler, and coauthored his first psychology paper (Uhr et al. 1962). He applied to graduate schools and went to Harvard to become a clinical psychologist.

In Cambridge Jim's first year in the personality program in the Social Relations Department featured his advisors Dick Alpert's (aka Baba Ram Das) and Timothy Leary's experiments with LSD and psilocybin. Jim had a bad psilocybin trip the first time because he feared he might never get back to reality. The second trip was interesting and fun. But the drug scene split the faculty and students, culminating in a public discussion at 5 Divinity Avenue between Leary and Alpert on one side and Brendan Maher and Herb Kelman on the other, who insisted that "expanding your consciousness" was not part of the graduate curriculum. His future wife asked him to choose between the drug scene and her, so he dropped that scene. His classmate Naomi Weisstein (1968, 1969, and the Chicago Women's Liberation Union) ridiculed that scene, as she gleefully collected parking tickets from the Cambridge Police.

Jim's first year support was in developmental psychology through the Palfrey Center, where cultural anthropologists Bea and John Whiting were conducting their Six Cultures Study. Weekly lunches with them, Roy D'Andrade, and others were memorable. Jim married at the end of his first year.

One day, Stanley Milgram asked him to throw a brick through the window of his classroom on the second floor of Emerson Hall. He did not obey. Both Jerry Bruner and Erik Erikson asked applicants to their seminars to write descriptions of why they should be admitted. Jim did and was turned down. He was a teaching assistant for George Goethals in his popular year-long undergrad developmental psychology course. He did a reading course in psycholinguistics with Roger Brown and Volney Steffire. Classmates went off in multiple directions, some to the LSD commune in Brookline, some to become clinicians, and some into social psychology. Hans Eysenck's (1952) article suggested that clinical psychology was largely a placebo effect, and Jim could not find any outstanding examples of the much-touted Boulder Model ideal of clinician-scientist. A course on scoring the Rorschach and a field placement at Boston State Hospital hardened his skepticism about clinical psychology, so he abandoned the plan to become a clinician.

His PhD in Social Psychology with a Concentration in Personality with Dave McClelland involved developing a TAT measure of the need for power (n Power). Dave Winter, a year behind Jim in the program, went on to base his career on this approach to personality and unconscious motivation. Jim's experience with developing the measure – by contrasting the content of TAT stories told by those whose “power motive” had been aroused with stories told by those not aroused – convinced him the method was unreliable. Although he split samples in half to cross-validate the measure, there were daily arbitrary decisions about what to include and what was ephemeral. The data forced him to develop a nonparametric statistical test (Uleman 1968) with Jerry Klotz in Harvard's Statistic department.

After four years in the program, he took a job at Michigan State University.

In East Lansing The obvious thing to do with a new personality measure is to seek evidence of reliability and validity. But reliability for a projective TAT measure is not straightforward, and validity criteria for power depend on a theory of social power. Even 50 years later, there are competing and inconsistent theories of power's nature and effects. In 1965, before the cognitive revolution came to social psychology, one place to begin was to posit that people higher in n Power would be more responsive to increments or rewards of power. So Jim tried adapting verbal conditioning to validate the scale. Although some publications resulted, with Gary VandenBos (Uleman and VandenBos 1971), results were slow in coming and underwhelming.

Oblivious to the field's rising expectations for publishing and getting grants, Jim indulged his curiosity by teaching graduate seminars on computer models and cognitive approaches to personality and supervising students' research on whatever interested them. Dan Wegner did an undergrad honors thesis, which led eventually to *Implicit Psychology: An Introduction to Social Cognition* (with Robin Vallacher 1977). He tried to find colleagues interested in causality but failed. He supervised clinical dissertations and

spent a lot of time delighting in his growing family.

MSU hired almost 20 new psychology faculties in 1965–1967, so the atmosphere around tenure was fairly cut-throat, especially among those who came out of graduate school with ambition and clearly articulated research programs. Jim had not, so he did not get tenure. He was interviewed at five places. Only NYU made an offer, based partly on an old-boys-network recommendation from a Harvard faculty member. Although his family had deep roots in the East Lansing community – having helped start a “free school” (à la Summerhill), working on a local political campaign, and his wife being active in the potters' guild – they had to move on in 1971. It was a difficult stressful time. Lionel Tiger's *Men in Groups* (1969) captured some of the dynamics.

In New York Jim got tenure and became coordinator (director) of the Personality and Social Psychology Program, an elective role he held from 1975 to 1997. At first, he did research in multiple areas, largely depending on students' interests – memory and the shift to risk, the malleability of the Bem Sex Role Inventory (BSRI), and attribution phenomena. He supervised Harry Reis's dissertation, whose work on equity theory had started with Ladd Wheeler, recently departed to Rochester. Jim collaborated with a new colleague, Fred Miller, and his grad school friend Eliot Smith on an attribution study (Miller et al. 1981). One summer, he devoured Lachman, Lachman, and Butterfield's (1979) *Cognitive Psychology and Information Processing: An Introduction*.

Do attributions occur when not requested by experimenters? The question was in the air. Eliot and Fred had gathered some reaction time data on this question (Smith and Miller 1983), and Jim discussed it with his grad student, Laraine Winter. She was taking a seminar on memory from Murray Glanzer and returned 1 day with a proposal involving Tulving's principle of encoding specificity. Her idea became her MA thesis, and Winter and Uleman (1984), the first publication on “spontaneous trait inferences” (STIs). Mel Manis

accepted the paper at *JPSP*. Research on STIs continues to this day.

In 1981, the social program hired John Bargh straight out of Michigan and Tory Higgins and Diane Ruble (former colleagues at Princeton). Suddenly the social personality program had an identity; social cognition arrived at NYU, and Jim had found his intellectual home. In subsequent years, Shelly Chaiken and Yaacov Trope arrived, and Susan Andersen was hired in clinical (later emigrating to social). The senior faculty in personality social were marginalized. NYU became known for social cognition.

In 1984, a preprint of Jim's paper with Martha Weston on the BSRI (1986) came to Bibb Latané's attention, and Bibb invited him to the Nags Head Conference on Sex Roles. Jim looked over the list of conferences and replied that he would rather attend the one on social cognition, submitting a draft of Winter and Uleman (1984) as evidence of interest. He headed off to Nags Head with only the vaguest idea of the field, and a fresh copy of Fiske and Taylor's *Social Cognition* (1984) for quick reference. Eliot was the only participant he had known beforehand, but he met a remarkable group of participants. They included all the major journal editors doing social cognition: Dave Hamilton and Tom Ostrom of *JESP*, Jim Sherman and Mel Manis of *JPSP*, and Dave Schneider of *Social Cognition*. Others included Susan Andersen, Nancy Cantor, Shelly Chaiken, Susan Fiske, Patti Linville, Lenny Martin, and Bill Swann. Jim attended the conference for years, and these people (along with Don Carlston and others who migrated to Duck, NC) became his reference group. The group also thrives as the Person Memory Interest Group (PMIG). It awarded Jim the 2013 Ostrom Award in Social Cognition.

Jim joined the Society for Experimental Social Psychology (SESP) in 1984, was added to the editorial board of *Social Cognition* in 1986, and was the associate editor from 1994 to 2006. In 1988, he was promoted to full professor, and enjoyed 16 years of grant support from NIMH and NSF over the next 20 years.

Into Automaticity Automatic processes commanded intense interest in social psychology

in the mid-1980s, not least because of Bargh's chapter "Automaticity" (1984), and Greenwald's Implicit Associations Test (IAT). Jim's interest in STIs was based on their being unintentional, thus demonstrating that attributions (i.e., traits) are inferred without explicit intentions. He did not want to claim that STIs are automatic because Bargh made it clear that automaticity involves other criteria too. STIs met the "unconscious" criterion too. But it was unclear whether STIs required cognitive capacity or could be interfered with or controlled. Subsequent studies examined these criteria. Winter et al. (1985) suggested that they did not require cognitive capacity, but a more sensitive set of studies (Uleman et al. 1992) suggested they did. Subsequent work by others has confirmed this. Uleman and Moskowitz (1994) showed that one's goals when processing the STI-affording stimuli (behavioral trait-implicating sentences) dramatically affect the frequency of STIs. So "spontaneous" turned out to be more accurate than "automatic."

Larry Jacoby spent a few years at NYU, talking about his process dissociation procedure (PDP) model and spending as much time with social as with experimental people. Jim was concerned that any demonstration that a cognitive process had some feature of automaticity made it "automatic" in many people's minds. "Control" needed an affirmative definition, and the PDP provided this. The PDP model had the additional advantage that it allowed for the simultaneous operation of both automatic and controlled processes in a single task. So Steve Blader and Jim did a series of studies to adapt STI procedures to the PDP (Uleman et al. 2005), documenting the importance of both automatic and controlled processes.

Bargh was getting so many requests to give talks and organize symposia on automaticity that he suggested to Jim that they edit a book. Mostly through John, they got a list of great contributors. The collection, Uleman and Bargh's (1989) *Unintended Thought*, was timely and widely cited. Later, Ran Hassin, a postdoc in the program, urged an update. Hassin, Uleman, and Bargh published *The New Unconscious* (2005), which has been even more widely cited.

Len Newman, Gordon Moskowitz, and Jim tried working a problem his colleagues (John and Tory) had long posed. How do you know that STIs refer to the actor and not just to their behaviors? Maybe participants merely categorized behaviors. Jim's student Alex Todorov finally got a satisfactory handle on this with the false recognition paradigm that has become standard (Todorov and Uleman 2002, 2003, 2004). Much of the blow-by-blow history of STI appears in Uleman et al. (2012).

Into Culture About 1990, Jim heard an early version of Markus and Kitayama's (1991) paper on individualism and collectivism (I-C) at SESP. His student Eun Rhee was interested. Professor Hoon Koo Lee had recently visited from Yonsei University and was interested too. They produced two papers, not on STI but on self-descriptions and individualism-collectivism (Rhee et al. 1995, 1996). The first found that Euro-Americans at NYU used more traits and fewer roles to describe themselves, that Koreans at Yonsei did the reverse, and that Asian-Americans at NYU were intermediate. The second showed that the structure of self-report I-C measures at the individual level varies by both culture and the group referred to. A follow-up to this last finding (Uleman et al. 2000) showed that feeling close to others (an aspect of collectivism) also varies by group and culture. Midori Toyama was visiting NYU from Gakushuin University at the time, and Jim had known Gün Semin since 1994. A long-delayed follow-up is pending. It shows that I-C at the individual level is determined at least as much by the specific group referred to (family, kin, or friends) as by culture.

Culture also affects STI. Newman (1991) stumbled upon this in his dissertation when he looked for developmental trends in STI. His Hispanic high school sample did not show STI. He speculated that Hispanic culture's collectivism might be responsible. Subsequent work (Newman 1993) showed that STIs are more likely among those high on idiocentrism (a measure of individualism). So Jim collaborated with Mike Zárate and one of his students at UT El Paso, where most students are Chicano. They found

support for the suspected cultural difference (Zárate et al. 2001). Thus for awhile, the conventional wisdom was that STI does not occur in collectivist cultures.

However, Yuki Shimizu (2012) of Saitama University showed otherwise in a developmental study of Japanese school children. She spent her 2011–2012 sabbatical at NYU and has collaborated with Jim since then. Her results have been replicated in Japan and in China, and now it is clear that those in East Asian cultures do form STIs but to a lesser extent. Lee et al. (2017) show that Euro-Canadians make more STIs than spontaneous situation inferences (SSIs) and Japanese form STIs and SSIs equally, consistent with East Asians' greater global (vs. analytic) cognitive and perceptual style.

Most interestingly, the difference between East Asian and Euro STIs is due to differences in automatic processes. Using Jacoby's PDP, Shimizu et al. (in press) showed that controlled processes in the false recognition paradigm do not differ between cultures. But automatic processes are more prominent among Euros than Asians. This suggests that cultural differences reflect automatic processes of which people are unaware and which are therefore difficult to control.

Into Social Neuroscience Daniela Schiller, a postdoc in Liz Phelps's lab at NYU, approached Jim about an fMRI study of primacy effects in impression formation. He agreed to collaborate, having no expertise or experience but being a neuroscience fan. They developed the stimuli and designed the study, and she and others in Liz's lab ran it. Schiller et al. (2009) found that BOLD responses in the amygdala and posterior cingulate cortex scaled parametrically with subsequent evaluations of the person stimuli. Importantly, stimuli were not consistently evaluated across participants. They dubbed this method – examining brain activation on the basis of subsequent stimulus evaluations – the “differential evaluation (DE)” method, analogous to the “differential memory (DM)” method that identifies brain areas involved in subsequent memories.

Other collaborations followed. Tobias Brosch, another Phelps postdoc, was interested in the fundamental attribution error (FAE). Brosch et al. (2013) asked participants how much each of 32 stimulus persons' behaviors was determined by their traits versus their situations. Stimuli were neutral in that there was no consensus on these judgments across participants or stimuli. BOLD responses showed that, relative to trials judged dispositional, *situational* judgments also engaged the dorsolateral prefrontal cortex, "potentially reflecting a controlled process that integrates situational information into attributions." Because these decisions did not depend on systematic stimulus features, this suggests that dispositional inferences do occur first and are then corrected by situational information.

Jeni Kubota (another Phelps postdoc) proposed more FAE work. Kubota et al. (2014) showed that physiological stress (via a cold pressor test) increases the FAE, a finding with many applied implications.

Into STI Processes The University of Lisbon was a hotbed of research on spontaneous inferences in 2009, with particular emphasis on underlying cognitive processes. Jim visited, agreed to supervise Tania Ramos on her 6-year Portuguese postdoc, and began collaborations with faculty. They developed and tested an inference monitoring hypothesis to distinguish spontaneous from intentional trait inferences (Ferreira et al. 2012). Another Lisbon student, Diane Orghian, came up with a connectionist computer model to suggest how both STI and STT (spontaneous trait transference) may be produced by one rather than two cognitive systems (Orghian et al. 2015).

Are the traits in STIs actually *causes*? This question has been around for at least a decade. A doctoral student, Laura Kressel, found a method to exploit in her dissertation (Kressel and Uleman 2010, 2015). The studies showed that trait-act pairs have cognitive properties similar to nonsocial cause-effect pairs, although they do not settle this complex question (Uleman 2015).

Another doctoral student, SoYon Rim, examined how STIs might be functional. Originally thinking of STIs as "automatic," Jim had assumed

they are difficult to change and only arise after a lengthy proceduralization processes. But working with colleague Yaacov Trope, they found that STIs are quite responsive to context (Rim et al. 2009). STIs are affected by how distant you think the target is and how abstractly you construe the target. SoYon also showed that an unconsciously primed affiliation goal makes STIs more likely and also links more positive traits to targets (Rim et al. 2013).

Finally, Prof. Nancy C. Higgins (St. Thomas University, Fredericton, New Brunswick) approached Jim with some data from an honor student. It is known that if you memorize several lists of exemplars from the same category (e.g., trees: maple, elm, beech), it gets harder and harder to recall particular lists. Presumably this is because you spontaneously cluster items in memory by category, and therefore confuse lists' contents. This happens even when categories are implicit. Would the same thing happen if you memorized lists of behaviors that all implied the same unnamed trait? Nancy's student's thesis suggested that it would. So Jim asked Yuanbo Wang to see if she could replicate the effect. The effect held (Wang et al. 2016) and showed the unconscious operation of proactive interference with multiple STIs. People spontaneously cluster memories for others' behaviors on the basis of their implicit trait implications.

In Conclusion "The scientist discovered spontaneous social inferences."

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