

HUDN

The HUMAN DEVELOPMENT NEWSLETTER

BACK IN THE SUMMER OF ...

A fond farewell to an inspiration, our friend, Professor Jane Monroe.

In this issue

Summoning Critical Thinking Skills

The Jury's in for PhD Candidate Joshua Warren and Professor Deanna Kuhn

A Course on Hand-Holding

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Riddle:
See you soon Alligator?

Statistically Significant

by Michael Swart

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For over 30 years, Professor Jane Monroe has been a part of the Teachers College community. Those of us that had the pleasure of either taking a course, working with, or just knowing Professor Monroe, are sad to see her go but excited for the adventures in her future.

Professor Jane A. Monroe was born in Aberdeen, South Dakota, the home of the golden pheasants. Her father was a teacher of history at the local high school and then a junior high school principal. She played baseball with the boys, a rarity in those days, in addition to playing woman's softball. "We were a wild team, kinda spastic," Prof. Monroe recalled as we sat, sipping tea at the newly renewed Café Bagutta. "We won our town championship and went to the playoffs. Of course, when we got there, we played this really professional-type team and they were really...eh, lets just say it was hilarious. On our softball team, we had three people in the outfield, but only one that was competent—and she was also our best pitcher."

As a sports prodigy, Prof. Monroe, admittedly in a league of her own then and now, ventured from South Dakota to Texas. She began college at an emerging institution where most students were on scholarship for either football or band. Standing around five feet tall and barely breaking 100 pounds, Prof. Monroe was forced to forgo her career in tackle football and embrace her inner musician. She played oboe in the concert orchestra and saxophone in the marching band. At that time, it was the official band of the Governor of the great state of Texas, playing frequently in Austin at ceremonies, parades and events.

A math major in college, she passed up a job making a lot of money with an upstart oil company in Houston to pursue a career in service. "I was coming along just at the time when women were beginning to make inroads in industry, and I was more driven by my desire to contribute to society than my desire to be rich, so I turned down money for service and went into teaching instead." That small oil company later became a company you may have heard of, Mobile Oil.

"My first teaching job was outside of Denver Colorado, where I learned to ski. It was easiest to get to Winter Park, and this was before the town of Vail and at a time when Aspen was there, but nothing like it is today.... I taught 8th grade math and girl's PE. This was before Title 9, so there were no girls in organized sports. I spent every afternoon sitting out in the sun. The schools were very poor and these kids needed practical skills that they could use in their daily lives. I'll never forget this one girl in my class who came in all excited one day. She told me how proud she was that when a salesman had come to their house to sell the family insurance, she was the one able to discuss business with him on behalf of her parents—that made me feel good.

That was the best job I ever had.”

After that single year, Prof. Monroe ventured to Rochester, Minnesota, home of the Mayo Clinic. “There I taught 7th and 8th grade math; it was nice and right next to South Dakota, which was good. It was a better school and I was teaching arithmetic and consumer math, which enabled students to do real world activities like evaluate insurance policies, write checks, shop and price compare. The good classes did pre-algebra.”

Her reputation preceded her and Prof. Monroe was asked to take part in the local sports leagues. “We had a softball and basketball league for women. Iowa was very big in women’s basketball, which was an entirely different game then. Guards and forwards remained separated on the two ends of court and it was not a running game.” Rochester was in a unique position for two reasons: first, it’s right on the border with Iowa, which put them in competitive proximity; and second, the town was full of all these great women who were attending nursing schools at the Mayo Clinic. As a result, Rochester became a haven for women’s sports. “I played shortstop on the softball team and forward on the basketball team. I was a good shooter....

We played touch football too, even though the field we were playing on was a very uneven field and one time I hurt my knee. I remember taking the opportunity to go the Mayo clinic and the physician saying, ‘This is the smallest football knee I’ve ever seen.’ I laughed.”

“I was there for two years. It was just the time of Sputnik. As a result, the NSF was offering these fabulous packages for math teachers, so, I got one and went to the University of Wisconsin and got a M.A. in Math Education. From there I was off to Beirut in Lebanon where I taught at the American Community School and the American University in Beirut.”

“I traveled everywhere, all the countries in the Middle East: Egypt and into Africa, Iran, Afghanistan, India and all over Europe. I had been at the site of almost every Roman ruin from the Coast of Spain to Iraq. A lot of trips were weekend trips; take a taxi to Damascus and then change cars and go to Jerusalem. Travel was mostly by car. One time, three of us went in a VW Bug to the source of the Euphrates River in the spring, and the roads would be mostly flooded from the seasonal deluge. We came to a fork in the road in the middle of God knows where, and as we got out of the car we heard the air coming out of the tire. We waited there until it came time for the men to head home from work. When they crested from up over the hill in the distance, we felt so fortunate. A group of them picked up the car, carried it across the water and changed our tire. It was really incredible. That was a two week trip in the spring since each year we got two weeks at Christmas, two weeks in the Spring and then all summer.”

The community school where Prof. Monroe worked was a boarding school and the parents were also in residence. “We ate with them and after dinner we would have these slide showing contests cause everyone was always going out to find adventures and doing crazy things. On weekends you could go to the mountains or go to the coast. It was great.”

After five years in the Middle East, Prof. Monroe returned to the States, specifically here to New York on another NSF gig. She embarked on a second master’s degree, this time in Theoretical Mathematics from the campus of City University which is now Hunter College. “Then I taught one semester out on Long Island and after that is when I came to Teachers College to start my doctorate in Math Education. I took a course in statistics that was like 4122 [probability and statistics] and started working as a TA. Then for two years in a row, a professor went on sabbatical and I filled in as a full-time instructor. Then came 1968.”

For students who don’t know, the country was changing in 1968. In the academic world, students took over their institutions and forced many major universities around the country to suspend the school year. “I was in a class on main campus in Mathematical Statistics and when the campus was taken over, the class just vanished and I never knew what happened to them. Then I got depressed about higher education and left New York and went skiing for a couple of years. When I came back in ‘71, they were revising the statistics program and I worked as an instructor until 1980 when I finished my degree and joined the faculty here at Teachers College. I remember at the first fac-

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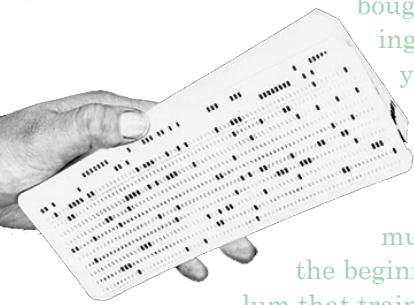


ulty meeting, I had already been here for so long, and taught so many classes, that when I was finally introduced as the newest member of the faculty as a newly anointed doctorate, there was a standing ovation."

"At the time, the main job of people in statistics was to do dissertation advisement. Two hours every week that you just did dissertation advisement. One year, I worked on 100 dissertations, helping them with their design and statistical analysis."

"One of the things that I worked on was technology development. When I started there were no computers. They had these mechanical calculators that could facilitate calculations for large data sets

but there were no electronic computers. In the late 1960's they had computers with punch cards and then TC bought a computer that couldn't do stats and someone had to translate all the existing packages so that they would run on this machine. There were two years when you couldn't do any statistical computing and even after you had to make your own punch cards, put them in the machine and then wait a day for the results."

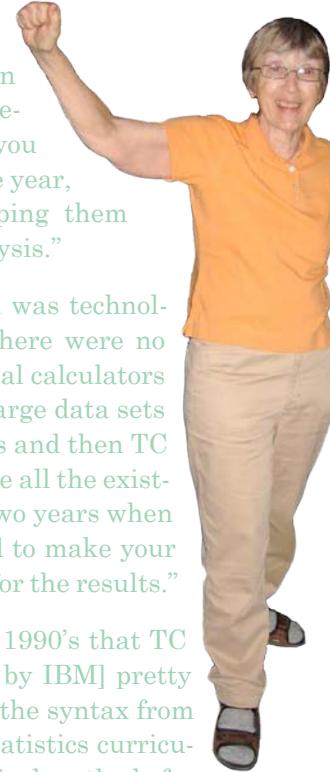


Fortunately for the department and the school, it was in the 1990's that TC got on a good path. SPSS [a statistics program, now owned by IBM] pretty much cornered the market from the beginning. But, if you look at the syntax from the beginning to now, it's pretty much the same. Now we offer a great statistics curriculum that trains students not only in the theory but also the practice of statistical methods for evaluating research."

"Looking back, I'd say my job changed mostly when Arthur Levine [former TC president] came and instituted the gross changes in the structure of Teachers College [departmental re-organization, structural, personnel, academic, and administrative changes]. Every time there was an increase in the fees, I always felt like I had to make my course better."

"When I compare then to now, students don't seem to know that they can tap this service and it is important that professors understand that they should provide this service... We [professors] understood that you didn't necessarily go to all of the dissertation hearings, but you assisted the students in doing their work. Unfortunately, things have changed, which is too bad, but that is the way it is. I hope in the years to come professors will return to those standards."

As Prof. Monroe embarks on her next journey, she plans to stay close to family, first venturing to Ohio and then on to Arizona. We hope that wherever her travels take her, she will always feel connected to the lives she touched. She will always hold a special place in the hearts of her co-workers and students at Teachers College, where she gave unconditionally for many wonderful years.





How Do Jurors Argue With One Another?

by Michael Swart

In the film *Twelve Angry Men*, a defendant accused of murder maintains his innocence amidst mounting evidence that he is guilty. From a jury of 12 men, one juror, played by Henry Fonda, stands alone, unable to reason beyond a doubt that the defendant is indeed guilty. His speculation over the course of the jury's deliberations transforms the conceptions of his fellow jurors. At the film's end, the jury returns with a verdict of not guilty. So what changed the juror's minds? Ph.D. candidate Joshua Warren and Professor Deanna Kuhn believe it has to do with the nature of the jurors' engagement in dialogic reasoning, the dialogues that transpire between the jurors as they reason towards a verdict. More specifically, Mr. Warren and Professor Kuhn seek to decipher further the underpinnings of how these discussions proceed and what attributes jurors do and do not share that contributes to their reasoning, discussions, and decisions.

Dialogic reasoning is at the heart of what transpires during jury deliberations. Kuhn, Weinstock, & Flaton, (1994) referred to it as theory-evidence coordination and they posited that a "juror needs to construct multiple theories (story-verdict constellations) that are evaluated against the presented evidence (as cited in Warren, Kuhn, & Weinstock, 2010). This process "requires representations of evidence, representations of each of the theories (verdict definitions) and a set of mental operations directed toward coordinating the two." Kuhn et al. (1994) also found that the more advanced a person's level of epistemological understanding (the nature of knowing), highly predicted by their age and educational level, the more likely they are to properly weigh evidence and consider the stipulations for reaching each possible verdict. Jurors use argument skills like discounting, counterargument, and justifying alternative explanations to reconcile their differences in hopes they will eventually find common grounds in order to make a collective decision



Professor Kuhn

Epistemological understanding is divided into three main categories: absolutist (an absolute, objective truth can be determined), multiplist (subjectivity of interpretation and judgment is recognized and given priority), and evaluatist (subjectivity is recognized but does not preclude evaluation and judgment of conflicting interpretations). The researchers predicted that the absolutist conception works against the execution of the theory-evidence coordination; the multiplist examines multiple



perspectives; and the evaluatist applies those multiple perspectives in light of the judgment criteria. Overall, the most effective discourse between jurors, they speculate, occurs amongst those with the highest level of epistemological understanding.

In the current study, 70 jury candidates from a New York City courtroom in Brooklyn were given preliminary assessments of their levels of epistemological understanding and then paired off into 35 groups. Each pair was then given recordings of proceedings from real murder trials, including the judge's verdict criteria (for first and second degree murder, manslaughter and self-defense) and asked to reach a verdict. Researchers recorded and coded each pairs' interactions to gain insight into their dialogic reasoning and decision making. Twenty-seven of the 35 pairs were able to reach verdict decisions while the remaining pairs were unable to agree. Subsequently, the researchers evaluated the discussions between jurors and coded "idea units" that consisted of either questions, claims or supporting justifications and then corroborated these findings with a jurors' epistemological stance.

Of the 70 jurors, 34 were absolutists, 26 were multiplists, and the remaining 10 were evaluatists. Additionally, 34% of the jurors were without a college degree with the remaining 66% having a degree of some sort. Those at the highest level, the evaluatists, tended to take greater control of the discourse and use more meta-discourse statements (evaluations of the nature of the actual discourse). Moreover, the higher an individual's epistemological level, the more likely they were to reference the verdict criteria as well as make direct counter claims to opponents' fallacious conceptions, especially when the two individuals within a given pair differed in their epistemological stance. The eight jurors that remained deadlocked and unable to reach a joint decision showed significantly higher levels of meta-decision utterances and references to the verdict criteria. In 12 pairs, only one member referred to verdict criteria, and in 11 of those 12, the other participant yielded to that person's verdict decision.

Overall, more advanced epistemological stances led to more moderate verdict judgments (i.e., second degree murder and man-slaughter). While absolutists tended to remain certain in their outlooks, those with more advanced epistemological stances tended to accept degrees of uncertainty and develop a unified theory by coordinating verdict criteria with evidence. Nonetheless, the predominant level of discourse between each pair was what the authors call "additive" in that one juror would present an idea unit and the other would merely add qualifying statements to it. Ideally, the goal would be to find ways to encourage a higher level of epistemological understanding within jury deliberations, like the considerations that Henry Fonda's character brought to his fellow jurors in *Twelve Angry Men*, in order to deliver the fairest judgments in accordance with the law.



Josh Warren



HUDK 6630 Cognition & Mobile Devices

This past year, local television stations NY1 and ABC7 reported on a course offered here at Teachers College entitled, Mobile Phone Learning and Technologies. The course, taught by Adjunct Assistant Professor and recent Teachers College graduate, Nabeel Ahmad and current Ph.D. candidate, Dominic Mentor, was a collaborative effort that addressed the possible roles that mobile technologies offer in the classroom. On the heels of the success of that class, Dr. Ahmad and Mr. Mentor offer a new class this fall, Cognition and Handheld Devices.

"After we offered the class on mobile learning in Summer B of last year and again in the Spring of this year, it was clear that there was more information than we could cover in one course," Dr. Ahmed noted. "This next class is more expansive, covering the roles that many different handheld devices play in how we process information. This class is also more research oriented and geared towards specific devices, including tablet PCs, Apple's iPad, Sony's PSPs, handheld games, Apple's iPhones and other devices. The new course is smaller in size than the previous class and that enables us to make the course more hands-on."

"This course looks at a different kind of input all together. On a tablet or an iPad, users interact differently with handheld devices than with desktop or laptop computers. The screens are smaller and implement touch screen technology that requires applications that incorporate different design elements. This class considers the cognitive affordances that you make for using these types of devices."



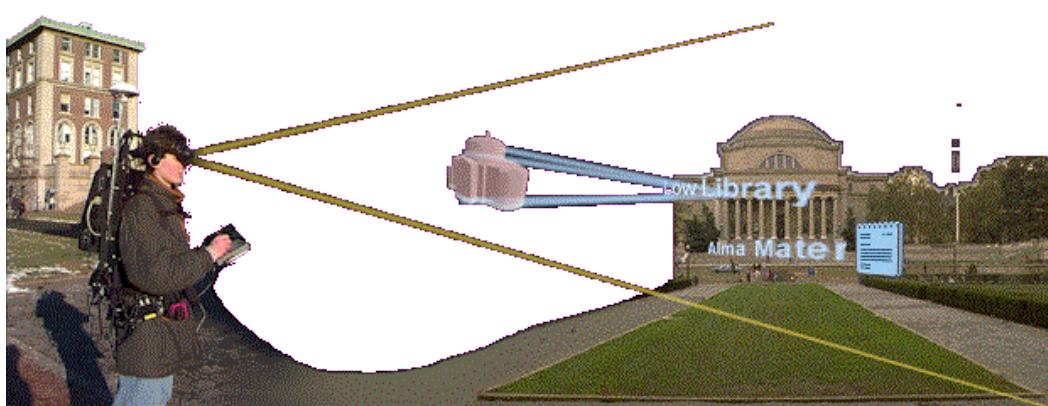
"For this class, we brought in researchers that have a more mobile-device-based background. We looked specifically at mobile gaming. When you go around on the subway you see all types of people playing different games, children and adults alike. We considered different interaction schemes, most prolific of which is augmented reality." Augmented reality, for those new to this area of study, is a class of devices that add information to a person's perception of the real world. Dr. Ahmad added, "For instance, there are programs now where you take out your cell phone at the park, scan the surrounding area and the application tells you about the park, its address, its history and so on."



Many of the applications being developed for these devices allow users to interact with their environment in different ways. Applications enable users to scan book covers, bar codes from advertisements in magazines and even identify songs by letting the device listen to a song.

"What we are focusing on is users' perceptions, interactions and deciphering what changes are taking place in the user as they adjust to this new breed of mobile devices. We are trying to figure out what people are willing to do, what they are not willing to do, and then apply that to educational settings," according to Dr. Ahmad.

In Cognition and Handheld Devices, the instructors have students come up with a learning activity that they would implement on a handheld device. In the first course offered this past Summer, most students focused on the latest tablets, like the iPad or tablet PC's. They frequently utilized these devices in a setting like a museum where the device provided exhibition information about the artists and their displayed works of art. Other applications included a travel application that provided information for areas by describing the original habitat, how it was settled and how it has changed over time to the present day. "Overall, most of the projects were based outside the classroom," Dr. Ahmad noted, "which makes sense being that the devices are mobile. This also drives at the root of what mobile devices offer the new educational landscape—a chance to expand the horizons of the classroom."

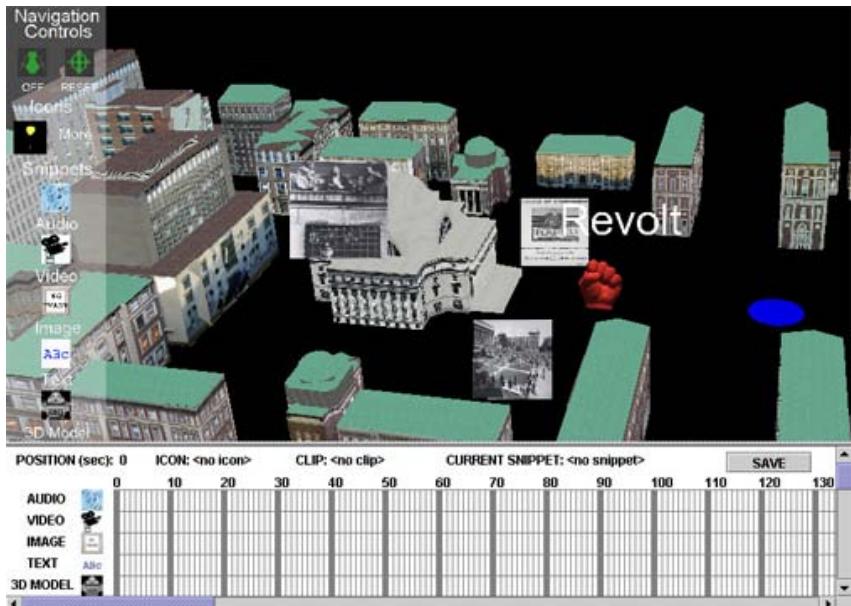


This second course differs from its predecessor in that it hosts a number of guest speakers from various fields related to Cognition and Mobile Devices. For example, one lecture included a Ph.D. candidate from the computer sci-

ence department who gave a great talk about augmented reality and took the students to his lab on Columbia's main Morningside Campus. He demonstrated how he is creating technologies used for improving job performance on site. Specifically, his project focused on how using lots of cameras

and a \$40,000 piece of headgear can actually immerse an aviation mechanic in an augmented environment. Using the technology, the mechanic could work on a real airplane with a superimposed heads-up display with real time information on assembly, maintenance, troubleshooting and more.

Additional mobile devices include Microsoft's surface tablets (although slightly less mobile, they still offer insight into new types of interactivity). "Overall, this class offers a lot more hands-on and practically-oriented information that students can actually use and we were fortunate to provide," Dr. Ahmad summarized.



"In terms of cognition, we looked a lot at cognitive overload and usability. Since mobile devices are so small, they fall under a new paradigm of how we process information. In addition to the fact that applications on desktops don't necessarily translate well to mobile platforms, mobile learning brings an entirely new perspective on what is known as situated learning." Situated learning means that performance increases when the environment that an individual performs in matches the environment in which they originally learned.

While additional considerations, like the visual system, color perception, geometrics and semiotics are relevant, Dr. Ahmad pointed out that these areas are covered by other courses offered at TC. "We were careful," he stressed, "not to overlap too much with other courses in order to maximize the specificity of this courses content and the relevance of the information to our overall objective."

"Mr. Mentor and I both did our research on mobile devices. We hope that this class, Cognition and Handheld Devices, in tandem with the first class, Introduction to Mobile Phone Learning, will provide valuable insight into how these technologies are changing both education and the workplace. We hope to be offering a third class this spring, Social Media and Learning, but that is still pending."



See you SOON GATOR

by Natalie Hadad

Greetings from the Sunshine State to the Big Apple!

It's been quite a transition leaving NYC and moving to Gainesville, FL to begin my Ph.D. in Developmental Psychology at the University of Florida (UF). I think about the people I've met, the things I've learned, and the goals I've accomplished at TC almost daily.

Earning my MA at TC has put me at an advantage here at UF. Papers written by Jeanne Brooks-Gunn and Suniya Luthar often appear on my syllabi, and I am happy to share with my new colleagues that I have worked with them both. Jane Monroe, who recently retired from TC, is also known as a talented professor and statistician among the UF faculty.

At UF, I am working with Darlene Kertes to study the influence of gene-environment interactions on stress. Utilizing longitudinal data, we examine the antecedents and consequences of stress. My focus is to uncover genetic and environmental factors that may put an individual at risk for developing eating disorders and other addictions. Certainly, studying genetics and psychopathology with TC's Elena Gregorinko has provided me with necessary information to succeed in this area of research.

Don't think that I have forgotten about my mission to motivate others towards a sustainable life. I've already contacted the management team at my new apartment complex and requested that we expand the recycling program. My next endeavor is to educate the community about the benefits of reducing, reusing, recycling, and other forms of environmental





consciousness. In the Department of Psychology at UF, I've contacted the Student Government in hopes to

start a campaign to advocate for conservation (paper, energy, water, etc.) I sincerely hope that no one at TC has forgotten their duties as responsible eco-friendly NYC residents. Also, don't forget to check out the new Rain Garden that is being constructed in TC's Russell Courtyard. It's guaranteed to highlight the beauty in environmental education.

Moving to Gainesville has also allowed me to appreciate the land that I have been fighting so hard to conserve. UF is situated among acres of nature preserves, natural springs, and hiking trails. Taking a break to sit under the trees and overlook the calming lake waters has been one of my favorite pastimes. So far I've spotted many lizards, birds, snakes, frogs,

bison, wild horses, deer, and (of course) bugs on my nature adventures. The one creature I'm still hoping for a (not-so-close) encounter with is an alligator. Guess I should have stayed in NYC for that one...

Wishing you all the best during your time at TC,
Natalie A. Hadad

Ken-Ken!

In each thick-line "block", the target number in the top left-hand corner is calculated from the digits in all the cells in the "block", using addition (+), subtraction (-), or multiplication (x) as indicated by the symbol by the target number. All the digits 1 to 4 must appear in every row and column.

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While a TC student heads to gator country, this summer, a gator came to the BIG APPLE!
8/22/10



Alligator Surfaces Beneath a Car in Queens

By TRYMAINE LEE and ANAHAD O'CONNOR

Published: August 22, 2010, New York Times

Tales of reptiles in the sewers have long been part of New York City lore, though they have been largely discounted as urban legend.

A baby alligator under a car caused a commotion in Queens. But here is the true story of a two-foot-long creature that Joyce Hackett came across in Queens on Sunday afternoon. She was on her way to a store that sells salvaged building materials when she missed her turn for Astoria Boulevard. So she turned around. She pulled up to the intersection of Newtown Avenue and 29th Street when she noticed a police officer and a small crowd of people clustered around a blue car.

She parked her car and got out to see what all the fuss was about. People were pointing under the car and taking pictures. That is when she saw it.

"It was about two feet long," Ms. Hackett, a novelist, said. "It was like the urban legend washes up from the sewer and says, 'What the heck am I doing here?' and hides under a Datsun."

Ms. Hackett quickly, carefully, slung her iPhone to ground level and snapped a shot, she said. A police officer on the scene warned her that maybe she should not do that.

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