## Empathy or Efficiency - A Tale of Two Parking Meters

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Parking is a pain. Searching for a spot transforms time and gasoline into stress and CO2. Studies estimate that 30 percent of the traffic in central business districts is produced by drivers cruising for parking. This is the driving force (sorry) behind a new wave of urban systems that use sensors and analytics to make parking more efficient.

These new systems bring to mind an experience I had while visiting Dubuque, Iowa to attend a meeting. I'd forgotten that I'd parked at a meter, my meeting went an hour longer than expected, and I came back to see a ticket on my windshield. I was annoyed at myself. But then I looked at the ticket: it was a "courtesy ticket" for \$0. 'How nice,' I thought, 'Dubuque is a great city!'

I don't know if technology was behind it. Perhaps it was my out-of-state plates or perhaps all first offenders get a courtesy ticket. But not all cities are as forgiving. A week later, in my home city, I got a \$42 ticket for a 3-minute lapse—no reprieve for first offenders here. In neither case was a smart meter involved, but I started thinking about how smart parking meters *ought* to behave.

On a Smarter Planet, what should a smart parking meter do when time is running out? Should it act as a digital snitch, contacting the meter maid so she can be there the moment the flag goes up? Or should it act as a citizen advocate, warning drivers ahead of time so that they have a chance to feed their meters? For drivers who are late, smart meters will know *how* late – would it not be fair to reflect that in the size of the fine? Make it \$1 a minute for overtime, rather than a flat \$42, and drivers may be less inclined to curse their luck (and their city) when they're 3 minutes late. If a car leaves before its time is up, should the meter leave the extra time as a small gift for the next driver, or should it zero itself out so it can get paid for the same time twice? These are little things, but they make a difference in how people experience their city. As a specialist in social computing, this is my job: to consider the social consequences of systems and the policies that they support.

My point is a general one: As cities become smarter, there is a choice about how to apply that smartness. Currently urban systems are run, at least in part, by humans, and as a consequence, are not optimally efficient. But efficiency isn't everything. Sometimes inefficiency is experienced as flexibility or as luck. It's nice that if I don't get back precisely on time, I can sometimes get lucky. This is the balm to the pain of paying \$42 for a 3-minute overage. But as we use smartness to squeeze inefficiency out of our systems, I worry that we will squeeze out flexibility and luck as well, making cities less forgiving and less comfortable places to live. This need not be so. Smartness can enable efficient systems, but it can also support new types of policies that give systems what feels like empathy, generosity and forgiveness. Efficiency is important—in its place. But let's also think about how to use smartness to design systems that are empathic, that recognize that we all lead busy lives, and that give people a break when they're running a bit late.