The Cynical Ergonomist: A day in the life of a police intelligence analyst in 2029

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In a popular dystopian future where life is tough for young adults, there is still street crime, and still a need for crime analysts. There was once a time where analysts used screens no bigger than 17 inches, and visual analytic systems simply supported decisions, rather than making their own. Let's jump to 2029 and spend a day with police crime analyst Alex Murphy, who doesn't always get on with modern technology, to see how things have changed.

"Bah, late again" I mumble to myself as I walk through the revolving door into police headquarters. Since they automated transportation and made it illegal to drive yourself, traffic has been terrible. Cars get stuck at crossroads all the time and they all drive so slow it's almost quicker to walk.

I hate getting in late, it means I always end up with the worst hot-desk. It's the one in the corner facing the wall, with the gesture tracking system that's poorly calibrated, and a few active tokens missing. I manage to get to the desk without being noticed, thinking I've gotten away with being late, when the face-detection scanner automatically announces my tardiness to the whole room. We're all cramped together in a small open-plan office so it's easy for my colleagues to hear the system announce my 9:16 arrival. I see my boss look up at me, grumble something about me not being able to take part in the fast forward, and look back down again. Great start to the day.

I grab my mug and head to the kitchen to grab a super-skinny, medi-caffeinated mochalatte. Some of my fellow analysts are already in there, deep in conversation. When I approach, one of them looks up and me and says "hey Alex, cast your eyes over this and tell me what you think". He places a small cube on the counter, taps it, and stands back as a holographic projection appears directly above. Using a mid-air gesture he spins the projection around until I can see a map with icons hovering above it. He asks my opinion on this particular case. I take a closer look, something doesn't quite seem right. There's a cloud of dense white points moving around in one corner of the map. Just as I'm about to point at the cloud and ask what it is, I feel a sudden burning sensation and quickly pull my hand away, realising I've been burnt by the steam from the kettle.

Coffee in hand, I head back to my desk, although I'm not sure whether you can really call it that. It's a corner desk, but the top is completely covered by a screen. As I place my coffee on the surface, the mug is detected, and the area directly underneath starts to warm up, keeping it at an optimal temperature. Recognising my face again, the system unlocks and presents me with a dashboard overview of the last 24 hours' crime. I'm just starting to get an overview when the system alerts me to an anomaly it has detected in burglary crime by flashing an icon in my head-up display that is embedded into my contact lens. I open up the alert and the system presents the changes as a histogram by physically raising parts of the desk to represent the different height of the bins. It looks like there's some missing data, but then I realise that my mug is in the way. I move it to one side and, as the remaining bars rise, the trend becomes apparent. The system announces that a report has been generated for

senior management, and it's recommended a new patrol route for police cars in that area. Not bad for a morning's work.

My day is broken up by my weekly trip to the masseur that the force has to provide since most of us have been suffering from neck pain caused by the flat displays. We all find ourselves looking down too much and it is putting excessive strain on the back of our necks. Any attempt to raise the desks at an angle has been faced with resistance as pens, pads and cups keep sliding off onto the floor.

After my massage and a hearty lunch, I load up a case file I've been working on for some time, where I'm trying to pin a series of crimes on a single gang. The system thinks it's nonsense, but I think I'm onto something. I'm analysing the modus operandi of several burglaries and trying to find the common features. I split the burglaries into subgroups and, to help me think, I grab some tokens and throw them onto the screen. I assign a subgroup to each token and ask the system to project the similarities between them onto the display. So far, my work has been quite productive.

I grab a fresh mug of coffee and place it on my desk. I then ask one of my colleagues over to talk through my case with them. It would be great to have a collaborative space where we could talk through the case together, but there isn't the physical space available in the building, so I invite them over to my desk. While I'm deep in conversation with my colleague, I don't notice my system making comments such as "Volume lowered", "Case 543B selected", "Please confirm deletion of Case 543B". "Case 543B deleted". Only when I look back at my desk do I see that I'd had gesture mode enabled, and I'd in fact deleted my work by waving my hands around while in casual conversation. Back to the drawing board I go.

After spending a few hours rebuilding the analysis for this case, I remember that I had made myself a coffee, which has been maintained at drinking temperature. I blindly reach for it, only to knock it over and spill it all over my screen. There isn't any need to panic, however, since the displays are waterproof. I grab a cloth and start to wipe up the mess. Just as the realisation hits that my wiping gesture could be misconstrued by the touch-screen interface, I hear those fateful words again: "Case 543B deleted". I'll never understand why the developers did not include an undo button.

As the day draws to a close, my boss calls me over and tells me to take a seat. "I've had a tweet from senior management" he tells me. "We're upgrading our Visual Analytics system to version 42.0. In fact, the analytics in this version is so intelligent that they've decided to remove the human from the loop altogether." I'm pondering whether it's still a visual analytics system if there's no human in the loop when he goes on to say "since this means you're not really needed anymore, and combined with your poor punctuality and lack of productivity this afternoon, I'm afraid you've left me no choice but to let you go."

I look at my boss in disbelief and try to figure out were it all went wrong. Then I remembered, it was on the 9th of November in 2014, when we installed version 1.0 of the software and senior management announced this new system, with its intelligent display surface and gesture recognition technology, really will be *the death of the desktop…*