

Scenarios Paper

Joachim awoke slowly, his alarm clock increasing in volume. The ceiling slowly pulsed the weather: blue indicated that it was going to be somewhat chilly today. On his bedside table Joachim's Amia glowed a deep red; his girlfriend was near her Amia! Knowing that it was late in Shanghai, Joachim merely stroked the Amia twice, their shared gesture for "good night, I love you". With the Amia, Joachim and his girlfriend had the freedom to send these short messages to each other; they had come to an agreement on what gestures meant what, which allowed them to be in contact with each other without being overbearing. It had dramatically improved their communication over the last six months. The day was busy; Joachim had a major article to finish before the end of the day. Instead of working at home, Joachim thought it best to enter new environs to invigorate himself.

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On his way to the coffee house Joachim decided to call up an old friend of his, Max, to catch up—it had been too long since their last conversation. Even though Joachim called Max rarely, he had a special gesture that activated his cell phone and dialed the number: an up-beat, zigzag, downbeat. Perhaps superfluous, but it added some spark to his day. Ever since phones incorporated gesture recognition technology, walking to work become much more interesting, as you were the witness to spontaneous performances of multitudes of people. While not necessary to make a call, many decided to create and use gestures anyway. The public quickly got over their fear of "making a fool of themselves" and reveled in the ability to create ever-more-interesting and elaborate gestures.

Joachim only had ten minutes or so until he arrived at the coffee house—Max was in the same rush. They agreed that now was not the time to have an in-depth conversation, but since Max was also walking on the sidewalk (albeit in Prague, not Boston), they decided to play their favourite childhood game: tag! Max had a head start, and the sidewalk in front of Joachim reflected this, showing Max's footsteps running away from Joachim. In quick pursuit, Joachim (not in as good shape as he once was) finally caught up with Max a block later, his force-resistive glove indicating that he had tagged Max. Now it was time for Joachim to run, but he was caught quickly, his jacket registering that touch of Max on his shoulder.

As Joachim turned onto the block with the coffee house he said good-bye to Max, resolving to call him and have a real conversation in the next day or so.

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– May I get a double espresso with myelin boost?

Joachim was quite glad for the advances in stimulant technology. As a kid his parents told him about their days of drinking things called "Red Bull" or something like that, drinks designed to give people the extra "pep" needed to get through their days. Yet these drinks always acted on secondary targets, using indirect materials. No more caffeine; now

Nick Knouf

Joachim could drink espresso (admittedly a holdover from when caffeine was actually necessary) with a special neuro-peptide that directly boosted the speed of neuro-conduction by improving the permeability of his myelin sheathes. Perhaps Joachim was addicted, but he had no time to consider this thought.

He sat down near the window, one with quaint leaded-glass that was from two centuries ago. The chair at the table realized that it was about to be occupied, so it brought down the shade to reduce glare on the screen that revealed itself in the small table. Joachim's key chain worked behind the scenes to negotiate a connection to the cafe's network, transferring Joachim's preferences and files temporarily to an encrypted file-system in the table. This key chain (and the corresponding back-end system) allowed Joachim to go anywhere and not worry if his files were in one location or another. Storage was so cheap that all of his work could easily fit on what once held only a gigabyte or so.

The goal today was to finish research on an article about Autechre, a late twentieth-century pioneer of modern electronic music. Joachim worked deliberately, his searching skills above par, his ability to find and convert old file formats beyond that of most people. Converting from the old mp3 format required much dexterity; many people weren't able to manipulate the bits so well. The blob of clay (electron-infused) melded itself into various shapes on its way from an outdated shape to a modern one. Soon he had enough shapes sitting in front of him to produce an extensive article.

Taking a break, Joachim sipped from his espresso cup. On the inside, near the rim, a little limerick appeared, supposedly left by an earlier patron of the coffee shop. The screen inside the cup only activated itself upon sipping so as to not distract Joachim from his work. Joachim smiled and let out a little giggle; this limerick was slightly dirty and provided a nice contrast to his rather staid research. Knowing that many aficionados of old electronic music frequented this coffee house, Joachim decided to leave a little treat. With a drop of the converted file blob into the receptacle on the table, Joachim uploaded an old gem of Autechre's into the system. Some lucky patron, if they choose a cup with audio output, will receive a classic of the electronic music genre.

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It was dusk by the time Joachim left the coffee shop. Even so, he put on dark-tinted glasses, not to block things out but rather to reveal the hidden aether that surrounded him. Joachim took great pleasure in looking at the electromagnetic energy that was before him, even permeating him. Since medical science had (nearly) conclusively shown that EM radiation was harmless to people, glasses that showed such radiation became less of a scare tactic and more of an on-going light show. They allowed people to more understand the connection between the digital and the physical world, the fact that even the digital bits had to take up "space" in a physical reality, even if that space were only the air, only a wave propagation.

The glasses Joachim wore coloured different frequencies differently: cell phone traffic in cyan, emergency and police data as a deep burgundy, instant and location-based

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messages as chartreuse. Since all the data was encrypted with 16384-bit keys, there was no danger of Joachim (or others) inadvertently eavesdropping on the conversations before him. It became a light show, an ever-changing public art work that was filled with contributions from everybody.

Joachim had configured his glasses to show location-based messages in a bright, brilliant white. In order to prevent being bombarded by unwanted messages, Joachim had a list of people whose messages his glasses would reveal. Yet this was sometimes not enough; there were too many interesting people in the world to limit the display of messages to only his friends. Thus Joachim's agent was instructed to select at random from the list of public messages and sometimes pop those up in his display, providing some serendipity to otherwise mundane messages.

In front of Joachim right now, in fact, was a public message about a local electronic musician who was DJing a club tonight. A local friend of his had tagged this message as well, saying that she would be there tonight and that Joachim should check it out. Since Joachim (as well as everybody else) had had public-private keys from a very young age, Joachim's friend was able to leave this message for him privately, secure in the knowledge that since it was signed with Joachim's public key it could only be decrypted and viewed by Joachim. Yet this technical detail took place behind the scenes and only made itself known to those who developed the technology.

After the long day Joachim decided that it would be nice to kick back and relax; he figured that if his friend had suggested this artist then the performance ought to be quite amazing.

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The location of the club was unknown to Joachim and along the way he made many wrong turns. However, Joachim's jacket gave a little tug when he started down the wrong street (even though the glasses clearly overlaid the route to the club), a nice gesture that was much better than the old technology of voices yelling at you.

At the club, Joachim configured his key chain to provide physiological data to the DJ. The new rage was creating music on the fly from the beat of the audience. Once limited to only what the DJ could see, now the DJ could incorporate invisible data into her performance. The energy was high; the DJ danced around her decks, arms moving wildly, one controlling the frequency and intensity of the sound, the other controlling the colour, tint, and type of videos playing along the edge of the room. Joachim was enthralled; since the music was based, somewhat so, on his own physiology, it was right in-tune with what he wanted.