

## **THE OLD IMPERIUM** Learning to live with my aging mind By John Crowley

any, maybe all of us, possess certain places, houses, streets, buildings, which when encountered in dream or memory always stand for intense feelings of loss or fear, of goodness or worth. Might there be for some of us a city that has such emotional character but that we've never seen or known, a sort of metaphorical city, a place whose public buildings and private streets we can wander, even in darkness, even blind? We know where the metaphorical temple touches the law courts and the broad way that takes us to the coliseum or the cathedral. There are metaphorical plazas and private enclosures (our privacies, our enclosures) and narrow, winding streets where we, even we, can be lost. There is trepidation; there is loneliness. Over long years some of these familiar places grow dim, unused, shut

up; some fall, and are not what they were; they will shift places and meanings until they disappear at last beneath the grass.

I feel myself to contain such an old imperium or high city, the place in which I take place. It ages as I do, and will be less than ruins in the end. I read somewhere of the failing of the great Roman aqueducts during the Gothic Wars, and of the Roman population strung out along the course of the Tiber. My imperium has contained them, too; as though from above, I see the little villages along the river, the cook fires and the houses, the great forum too, weed-grown, and the roofless temples and the fallen columns, the children running home.

n July 2016, after taking the battery of tests that constitutes a neuropsychological evaluation, I was diagnosed with mild cognitive impairment, or MCI. Some months before then, my wife, L., had begun to notice and point out to me some signs: wrong word choices or failures to come up with a common name began to happen more than occasionally. Then came instances of fumbled choices or misunderstandings in daily activities. Some of these incurred serious if momentary risks. L. was puzzled. I wasn't in denial about these incidents; I was, though, in a state of disbelief. Each one could be dismissed as random; I could perceive no pattern; it seemed that my thought processes remained sound. I was also pestered by the sort of slips that unnerve the old and can seem comical to the young and the unimpaired—forgetting where the car is parked, opening the closet or refrigerator door and standing immobile, unable to remember what was wanted, often something not kept there. I was seventy-two years old, and it became clear that I needed help. My wise doctor-my primary care providerfound my symptoms as I described them doubtful as indications of impaired

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cognition, but agreed to prescribe a neuropsychological evaluation, to create a baseline against which future tests, if needed, could be compared.

That first evaluation was conducted by a neuropsychologist, a cheerful pink-cheeked man I now remember as white-bearded (but of course I am not to be trusted with such recollections). Dr. T. and I had a longish conversation about family, hobbies, work, illnesses, problems with memory or spatial orientation, falls, medications, alcohol consumption. He then put me through a series of tests and assessments that could indicate whether, and to what degree, my cognition was impaired, and if impaired, what could be predicted about future loss.

The tests were almost childishly simple, though not necessarily easy. With pencil and paper, I copied geometric shapes shown to me. I was told brief stories of people and places and things. I was given what I now know to be the Stroop Test: words printed on cards in various colors were put before me, and I had to name the color of the word instead of the word itself: if the word RED was green, I had to say "green," not "red." This required a wearying level of attention. The Wisconsin Card Sorting Test: a row of four cards was laid out, showing one, two, three, or four simple shapesstars, crosses, dots, squares-in one of four colors. I was to place cards from a pile onto the appropriate card in the row. A star shape obviously went with a star shape, a square with a square; I sorted them that way. But then Dr. T. said I was wrong when I put a star on a star. Okay. After a few more wrong calls, I changed my method: a blue card, regardless of its symbol, went on a blue card. Right! This went on, the rules changing regularly but unannounced (color of symbol, type of symbol, number of symbols). Smiling Dr. T. began to take on the affect of a cardsharp fooling a mark.

I was asked to name as many objects as I could that begin with the same letter, in the space of a minute. (I have no idea why the letter d remains in memory as the one given me.) I compiled in the allotted time more than he'd ever seen. "Word guy," I said, absurdly proud. I did well on the Grooved Peg Board and the Trail Making Test. I remember being shown cards with children's-book pictures of various items-fruit, tools, clothes-and after the cards were put away I was asked questions about how many, and of which kind of thing I had seen. This, too, had a key that could be intuited, but I only perceived it at the end. I did less well when time had passed and I was questioned about details of the little stories I'd been told earlier: the names of the persons, what they carried, how many children, and so on. The whole process was very strange and faintly comical.

Only after I had taken them twice more in further sessions did I learn the names of these tests and their uses.

The old imperium was fading, memories could not contain it: monuments had vanished and couldn't be recalled

Some are quite old, having been developed in the Thirties and Forties to assess aptitude. Many of the tests concern "executive functions": complex cognitive abilities that enable the identification of goals, mental planning, behavioral organization, and actions to achieve these goals. An article in Dementia & Neuropsychologia on the National Institutes of Health website describes them: "Executive functions are especially important in older adults for performing and troubleshooting routine tasks, from the most simple to the most complex." Oh, those routine tasks ...

Dr. T. took a few days to evaluate my scores. Summoned to discuss the results, I was told that a few were suggestive of trouble, mostly in those executive-function areas. Overall, though, my cognitive functioning was normal or better than average (all those dozens of *d*-words I compiled). I would not need to redo the tests for a couple of years, unless my family and associates noted an obvious decline. This was comforting, but contained a

sort of secret sharer too. I was not off the hook. In fact, through that year and much of the next, I noticed that I was getting less competent. L. observed it; I often could observe it as well: my general all-will-be-well toujours gai mindset tended to rack up the good days and successful encountersthe apparently unimpaired ability to write and teach writing-and shake off the errors. That mode became increasingly untenable as I stumbled in confusion more and more often. Fear, shame, guilt, and embarrassmentthe Four Horsemen of the disintegrating self-were frequent visitors. I was often angry.

In the meantime, a heart valve, which had been diagnosed as certain to fail at some point, now got worse. Blood was not efficiently reaching and oxygenating my brain. My cardiologist scheduled me for a valve replacement operation. Since operations of this kind involve anesthesia, they are not good for post-op brain function, and if valve replacement is pretty routine, it's not for the patient. What happened was not quite what was

expected or feared: while I was on the operating table, my brilliant and resourceful surgeon discovered that in addition to a failing valve, my aorta was already stretched and in danger of tearing. In what my cardiologist called a triumph of discernment and skill, he patched the tearing point with Dacron.

What was remarkable, or wonderful, was that in the months following the operation, many of the word-finding problems and speech troubles that had rapidly accumulated began to lessen dramatically. Perfusion: blood flow feeding oxygen to the speech centers and elsewhere in the brain. I was still forgetting things-names, stories, events, duties. But I had also begun remembering more things, and in a way that was new to me. When a name or a concept occurred to me, or came to me from conversation, it could sometimes arouse a sort of momentary penumbra of associations, mostly not quite graspable: the word or idea catching subtle reflections or glints from other and often wholly different or irrelevant realms. Sometimes I

could discern the association before it vanished—a consonance of sound, a link to when or how I once dealt with or used the word or notion, a memory of a text or a voice. More often it would steal away before I could get hold of it.

We trust a reserve or bank of below-conscious-threshold memory

to manage a lot of what we do throughout the day. It seemed I still possessed a vast amount of this sort of memory, and yet I was less likely to be able to act instantly on it; the certainty of what to do next arose more slowly into consciousness, time enough for me to doubt it. (Is that right? Is this the one I meant?) Because I felt afraid that I didn't really know the things I thought I knew, I was more likely to pause, becalmed, and respond wrongly; and when I did, I'd feel that frisson of fear and shame. The old imperium was fading, memories could not contain it: streets whose termini I knew seemed to peter out into nowhere, monuments had vanished and couldn't be recalled.

t was now more than two years after my first neuro-psych eval, as it's nicknamed, and time to schedule a follow-up. I learned that Dr. T. had retired; I'd have to sign up with someone new, though the new someone would of

course have access to Dr. T.'s baseline data. Dr. M. had an office in a large medical center in a city about an hour away. A slim and slightly foxy man—a contrast to jolly Dr. T. He was equally thoughtful, asking questions about my perception of my condition, listening with care both to me and to L., who actually had more information about me logged and available than I did myself.

Then I was turned over to a technician for the tests. I had trouble copying geometric shapes with a pencil, and was given a do-over. The little stories about people and their children and their activities—where they went, what their names were, what they bought or carried—were returned to and asked about in different ways before the session was up. I felt insecure about my answers, even when I was right. My list of words beginning with the same letter was almost as long as



before. But I went home in a state of uncertainty and apprehension.

When L. and I returned a week later, Dr. M. gave me a diagnosis of mild cognitive impairment. He explained that my condition was unlikely to be Alzheimer's—I'd done well on the short-term memory tests. I was unable to ask the obvious question, but L. could: What was the expected progress of this condition? To illustrate, Dr. M. picked up a pencil and drew a slightly downdrifting line: the likely, though not certain, course. Could take a long time, could perhaps never change much. At a certain point, though, it could worsen rapidly: his pencil turned sharply down, a swift long line. Dementia.

My mildly impaired cognition had a hard time taking this in. Dr. M.'s illustration reminded me of the cartoon predators that recklessly chase their prey off cliffs and stand in the

middle of the air until they look down, realize their situation, and drop like stones. L. was the one who asked for the details: what might come next, what might help or delay. Exercise? Oh yes, said Dr. M., anything to get the heart rate up. Walking, which I did often, was excellent. I asked about drinking. Alcohol, he said mildly, is the enemy of cognition. Still, nothing in what he saw meant that I couldn't teach or write as I had been doing. He would recommend a neurologist, who would schedule an MRI, just in case. And in two years I would return, and see where I stood.

The MRI results, when they came in, showed levels of atrophy consistent with my age, but nothing more; the atrophy was general rather than specific in location and didn't show the amyloid plaques of Alzheimer's. But the diagnosis of MCI remained.

If I had lost mobility, or hearing, or was restricted in movement or activity by arthritis or nerve damage,

would I have felt as lost in the world as I did when presented with my diagnosis? When people become disabled, whether in a moment (accident) or over time (illness), they can sometimes use the willpower and commitment and skills they have already learned to retrain and reimagine their sport or their practice, all without "overcoming" their disability-it remains with them. Mental powers are harder to reshape, and the loss of power to reshape is part of the disability. This requires a manager, and if it's the manager that's becoming disabled—well, what then?

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eyond cutting out alcohol entirely-which I soon did and still maintain—and going for long walks around my town's hills, what could I do on my behalf? The various games advertised to improve memory and in certain cases stave off dementia-Lumosity and its like—have little or no power to improve memory, attention, or good mentation. The effect is that of simple training: people get better at the tests because they practice taking the tests. I understood this even when I began playing chess online with a computer—I hadn't played in years-but I was still gratified that over a couple of months I got better at it, while still remaining in the lowest rank.

I also devised a practice of my own: being lucky enough not to have to leap out of bed in the morning at the sound of an alarm clock (I hate and fear alarm clocks, not the devices themselves, but the sudden shock and, yes, alarm they cause), I began spending some time before arising in going over, in as much detail as I could, all that happened the day before. I don't mean all that happened in the great world, or what I thought about things; just the everyday events and occurrences, how my time was spent. Since for most of the week I wasn't going to an office or passing hours on repetitive tasks, my days were rather varied: household jobs, errands, projects worked on. Blank periods appeared, but if passed over and returned to, they could usually be filled in. Of course the practice involved a certain paradox or bind: I could believe I had adequately remembered the various links in the chain of time and accounted for the day, but I couldn't know whether I had in fact forgotten things, small or large. Asking someone else who had their own knowledge of the day wouldn't tell me much.

ome time after the diagnosis specifics lost to me—I was driving home on the interstate with L. It had been a long and tiring day and traffic had been heavy through the tangle of on-ramps and lanes closing and opening. A traffic buildup occurred as ahead four lanes shrank to two and then one around a construction site. We were stopped in a spot between two huge white trucks in the lanes to the left and right of us, with another huge white truck ahead. Suddenly I felt my car moving backward, rapidly, silently, as though rolling downhill. I tramped on the brake. The backward movement continued. I panicked and tried to shift the car into park to make it stop rolling, and turned the ignition off-I was obviously in danger of plowing into the car behind. All this time L. was yelling at me: What are you doing? Stop! Stop shifting! But I couldn't.

At last I realized—though with lingering disbelief—that I had not been rolling backward, or moving at all. Nothing was wrong with the car. The three trucks around me had moved forward together (they were my entire field of vision) and I had interpreted this as my car moving backward. I explained to L. what I thought had happened and how confused I was. Trying to compose myself, I moved forward with care following the truck ahead, until we all came to a stop once more and waited.

Moments later the thing happened again. Again I felt myself unstoppably rolling backward. I did the same thing with the brake and the ignition and the gearshift. It lasted a shorter period, but finally L. got through to me and I recovered my orientation. Traffic started to move continuously; the trucks moved one by one into the single open lane. I followed.

It was clear that a confusion like this in a different setting could have serious consequences. I would call Dr. M. in the morning and describe it all. What kind of symptom was it? What did it portend, if anything? Did it sound neurological, psychological, a common feature of MCI? L. thought it had to do with a worsening ability to process visual and spatial information. What I said to her was that it felt as though I had fallen under a spell.

Late that night I awoke. Maybe a dream prompted it, but I found myself thinking about the irreversible change the earth is going through, the earth becoming not the earth, the world not the one I was born into. I lay abed appalled at how entirely impossible this was—it simply could not be. And a conviction, a vision, seized me that it was not only impossible to believe, it was *not the case*. It was an illusion, an evil dream I was stuck in, not real. This wasn't—at least it didn't seem to be—the rhetorical extravagance or exaggeration we often permit ourselves: I can't believe it, this isn't happening, when we know very well it is and we are in it. The conviction persisted for an immeasurable time, until I fell asleep again.

Remembering in daylight this sensation of awaking from a dreamworld to reality seemed cognate to the experience on the highway: the feeling of being ensorcelled and then awaking from it. I really was rolling backward; then the spell was lifted, and I wasn't. Then again I was, and then it was lifted again. Climate change isn't illusory, but certainly my drifting backward was. If this was the beginning of larger and longer-lasting enchantments, I wondered whether I would be able to tell when I was under them, and of what kind they would be.

r. M. called the next day. I described the incident on the highway at length. He listened carefully, and asked whether all three trucks, left, right, and center, had started moving forward together—and as far as I remembered they had.

"Very common experience," he said. It was an optical illusion. He'd had it himself—in a car, the sensation of rolling backward, jamming the brake (which his foot was already pressing) and being unable to stop, because of course he *was* stopped. The sensation depends on limited perception of surroundings: it's as when a train beside your train, beginning to pull out while your train is standing still, gives the sensation that it's *your* train that has begun to move.

The relief was immense. But what we didn't address was how I was unable to process the first instance before it happened again. Shouldn't I have been able in that interval to figure out what was up? L. couldn't help me because she hadn't been able to understand why I was behaving as I was. Like the climate-change spell, I felt not that I was losing my hold on things but that the world was failing me.

woman we've known for years, a licensed practical nurse who took care of our daughters when they were kids and has remained a friend since then, has long practiced meditation; her partner teaches classes. When I told her the story of my MCI and the various symptoms and events, she (who has cared for many patients in VA hospitals and nursing homes with dementia of many kinds and many degrees) said it didn't seem like much to her; maybe the intensity of my attention to the events was creating anxiety. But she certainly recommended meditation. I wondered whether I was in fact too old to begin, but she said no, not at all. There are plenty of classes offered in practical mindfulness, she said, but for her it was impossible to think of meditation as simply therapy; it was deeply tied to spirituality, compassion, and self-knowledge, and she'd be reluctant to counsel me if I couldn't accept that part. Though I had to admit that part had always been foreign to me, I was willing to enter into it. So she thought twenty minutes twice a day: sitting, at rest, back straight, eyes closed, attending to breathing. Breathe in, breathe out. Try it for a good while, being humble and patient, and see what happens.

In her view, mindfulness actually arises as an effect of meditation, which she explained is mostly a matter of attention: sit, close your eyes, attend to your breathing, and allow what happens in your consciousness to happen. The challenge in doing it, she said, is that it is simple but not easy. Nothing happens for long periods while you sit. There is no describing what it is that will be learned or understood in the process, but if done faithfully a lot will be. It's hard, she said, but at the same time involves no struggle; chastising yourself for drifting off, for getting caught up in useless or distracting thoughts, plans, grievances, is no part of it. She compared attention to a puppy: sit the puppy next to you and it will stay for a



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time, but soon it will toddle off, and you have to bring it back and sit it by you again; it's what puppies do.

There's no point to feeling frustrated or defeated. The Vietnamese Zen monk Thich Nhat Hanh, in his book *How to Sit*, says that "even when you think you are sitting alone, your ancestors are sitting with you.... There is no separate self. We are a current. We are a stream. We are a continuation."

or me, ceasing to think can only mean ceasing to talk. I talk to myself constantlythat is, with myself as audience. I talk to others not present but who might be, and to others less specified; I explain myself in sentences, in a voice that's mine, though my mouth and larynx and vocal cords don't move (or maybe they do); I tell amusing stories I have told many times before, recount fun facts, expound wise thoughts, explain things that need no explaining, sometimes to a particular imagined listener, sometimes to vague stand-ins or to no one at all.

am actually dreadfully tired of this speaker. His speaking is not only repetitious and not as witty as he thinks, but if mindfulness helps a person to achieve stillness, to avoid errors and missteps in the world, this endless word production tends to cancel it out. Maybe at some future time I will notice that it has receded. I'm sure that at one future time it will stop for good. In the meantime, I have continued meditation more or less faithfully since I began. It was hard, until it got easy, and while the results are difficult to describe or assert, the insights I have gained are real to me. It hasn't fixed whatever cognitive impairment my brain has suffered, nor much stilled the inner voice that does stand-up daylong, but it has changed how I experience the impairment and the voice: acceptance over struggle, which makes for changes in what I think and how I act. It seems fatuous or paradoxical to say that I can combat my loss of acuity by merely taking careful thought of what I must do. But that's what I'm attempting and what I can only keep on at until I am lost in my ruins, and inadequacy and confusion win.

y third (and so far final) neuro-psych eval, in June 2018, again with Dr. M., proceeded exactly as the others had. I asked whether my familiarity with the process and having twice taken the various tests would skew the results. but Dr. M. said no, the tests differ enough to be useful; that I'd taken them already was accounted for. Perhaps it was a result of the meditation, but I was able to approach this iteration with a certain-what? Good faith? Buovant calm? Mindfulness? In any case, the results this time were a little surprising. I scored higher on some tests than I had two years before, and on a couple of them-this seemed to surprise even Dr. M.-my scores were higher than the results on Dr. T.'s tests five years earlier. I asked, rather giddy with relief, whether he was now going to withdraw his diagnosis of MCI. Well, he said, let's wait and see how this evolves. I pictured again the pencil line of mild impairment taking that dramatic dip toward nowhere.

Only recently did I learn that it was possible to request the results of the evals as written up by Dr. M. They don't differ much from what he explained to L. and me, though couched in language a bit less patientfriendly. I learned that I scored 107 on the nonverbal part of the Wechsler Abbreviated Scale of Intelligence, putting me in the upper half of average. My word knowledge was "measured in the very superior range," but my verbal associative fluency skills were down from Dr. T.'s results (which I had also acquired). In the words of Dr. M.'s 2018 report:

While he still has scores that suggest relative decline for a historically highfunctioning man, and therefore the diagnosis of Mild Cognitive Impairment remains appropriate, his cognitive functioning seems to have stabilized over the past two years ... With significant improvements in his lifestyle, he seems to have reached a plateau.

I very much like the word "plateau," and always have. Three years later, I think I still stand on that plateau, and yet every day I find myself unable to recall a name or a word I once knew, including some I learned in childhood. Tests only test what they test: I'm fairly sure my spatialtemporal sense is worse than it was when I went to see Dr. T., no matter my test scores. That secret sharer I perceived beneath or around the cheering results he described is still there, and touches me on the shoulder every day, no farther off than before. There are times and days now when I feel, as on that highway, that I am slipping backward helplessly while the world stands still or moves forward at its usual pace. Shame, fear, guilt, and embarrassment haunt, even when I can't think why they should. Every day, L. notices that I confuse the names of things and people that I know well, that in fact I knew the day before, or an hour ago. If I give up seeking it, the right name or word often arises in time, like an answer surfacing in a Magic 8 Ball. Because, in fact, I had never forgotten it.

In any case, and from now on, I will wake to feel that something is not right, or is somehow missing. It's an aspect of aging, and of mild cognitive impairment for those who experience it; many don't, up to the end. I am mostly alert, I write and read, I discuss and argue, but I am now firmly of that company who forget their passwords but remember old grammar lessons, who hesitate, who even on familiar roads grip tight their steering wheels, who spend good days in the garden, who transpose vowels, who study recipes, who still do their own taxes but check with an accountant, who reread books they read in youth, who are often baffled, who try to describe beloved old films, who know right where they parked the car but don't find it there, who can remember almost all of that poem, who forget the plan, who bore, who are bored, who can't recall whose hat this is. We are wise to let wonder and pathos stand in the place of forgetting and loss, like the travelers in awe amid the ruins of Rome or Nineveh, where their ancestors had stood, and could see around them the glories that were no longer there.