A Few Thoughts on Time Travel

The other day—by which I mean several days ago, in the past—my wife and I were watching a Red Sox game on television. [We are retired ex-pats living in Spain, and as a special treat we signed up to MLB TV so we could watch American baseball games and feel some connection to New England, from whence we fled when Donald Trump was elected President.] J.D. Martinez was at the plate. The count was 2-1. I turned to my wife and said, “Watch, Martinez is going to hit a home run.” And sure enough, at the next pitch, J.D. swatted it over the Green Monster.

When my wife turned to me in astonishment and asked how I knew that Martinez would hit a homer, I flippantly said, “Time travel.”

“But I was sitting right next to you the whole time” she replied.

“But that’s the real trick,” I flippantly continued. “Anyone can time travel into the future. The real magic is being able to jump back into the past.”

Wikipedia tells us:

It is uncertain if time travel to the past is physically possible. Forward time travel, outside the usual sense of the perception of time, is an extensively observed phenomenon and well-understood within the framework of special relativity and general relativity.

We all feel time’s arrow pushing us forward all our lives, from cradle to grave. But if we move faster than the world around us—like when we fly in a jet airplane—our body clocks run just a little bit slower than those of the people who remained on the ground, so when we land we are in a future that is a millisecond ahead of what it would have been had we stayed put. Of course such a minuscule time dilation is imperceptible to us humans with our slow-moving brains, and in order to achieve time travel into the future that we could sense we would have to evoke something like Einstein’s hypothetical tram moving at the speed of light (no doubt with a boy inside bouncing a ball that appears to him to go up and down but seems to an observer on the sidewalk to be traveling in a looping arc).

But there is no need to evoke thought experiments from theoretical physics to illustrate the relativity of time. Anyone who has ever been in a car crash knows how time seems to slow down, the crunching up of metal fenders and the inflating of air bags.
proceeding as if in slow motion, seconds of action filling up the spaces in our memories as if hours were passing: someone involved in a crash might notice a stray gum wrapper flying past their face towards the windshield and, in the split second between the time they first saw the wrapper and when it hit the glass, think “How did that get there? Was Billy chewing gum in the backseat when I drove him to school this morning and forgot to pick up after himself?”

And mental relativistic time dilation isn’t confined to car crashes. Any one who, like us, has packed it in and uprooted themselves to live in a new culture and communicate in a language that is not their native tongue, will know what it’s like to live in fast time. Every day brings novelties: the first time you went into the Gothic cathedral up the street from where you live; the first time you walked around the Medieval walls of the city; the first time you ate the horrible local delicacy everyone in town raves about . . . But, as time goes on, these soon wear down into mundaneness: I now scarcely glance at the Cathedral’s spire; I know enough not to order callos (tripe) in a restaurant; and as a matter of course I too call out an incongruous <<luego>> (“later”) greeting when passing by an acquaintance on the street rather than use the <<hola>> I was taught in high school.

But, whether fast or slow, time’s arrow seems to go only in one direction. There doesn’t appear to be a tram going the negative speed of light that we can hop onto to travel back to the past.

The past is always with us. As William Faulkner put it in *Requiem for a Nun*, “The past is never dead. It’s not even past.”

In our normal lives, we carry the past in our memories, constantly modifying it to suit our ever-changing present. But, as anyone who is my age certainly knows, our memories are fickle things. I can’t remember where I left the car keys or my glasses, or what I was just talking about, but I sure remember the hidden prize in the cake my mother served me on my third birthday.

The past also lives on in the historical record, in the manuscripts and inscriptions left to us by literate predecessors—documents that historians are constantly reevaluating to suit their own ever-changing world views. History is written by the winners, so they say; but, eventually, what goes up must come down, and tomorrow’s history will be written by tomorrow’s winners.
And the past physically lives on in the archaeological record. Almost every hole that has ever been dug in the ground is still there, albeit most are usually now filled in with backfill that only a trained stratigrapher can detect. And every clay vessel ever fired in a kiln is still here, albeit many survive only in the form of sherds that archaeologists can typologize and use to construct their chronologies. And, like our memories and historians, archaeologists are constantly reevaluating the past to suit ever-changing needs, such as interpreting the past physical record in terms of the latest academic fad.

So, it would seem that Faulkner was right. There really is no past, only a constantly shifting present carrying with it an ever-changing memory of the past.

If my characterization of what it is that historians and archaeologists do sounds harsh, we can be more sympathetic to fiction writers who, after all, are just trying to tell entertaining stories, not record objective truths about the past.

Time travel became a popular theme for fiction writers in the 19th century, at a time when industrialization was speeding up the pace of modern life. As the slow, repeating, cycles of the agricultural world were giving way to the clock-punching shifts of piston-pumping factories, fiction writers were naturally focused on the future, on what changes were coming next. The protagonist in Washington Irving’s 1819 tale “Rip Van Winkle,” for example, falls asleep in a British American colony and wakes up twenty years later in the new United States. [Irving did not originate the trope of time travel into the future by falling asleep for an unnaturally long duration. The 1st century BCE Jewish sage Honi ha-M'agel is said to have fallen asleep for seventy years after talking to a man who was planting a carob sapling, waking up to see that man’s grandson harvesting carobs from that tree; the Seven Sleepers of Ephesus were a group of persecuted Christians who reputedly fell asleep in a cave around 250 CE only to wake up two hundred years later to discover that the Empire had become Christian; the 3rd century CE Greek historian Diogenes Laërtius recorded the story of the legendary Epimenides of Knossos, who went into a cave and fell asleep for fifty-seven years; and it is generally thought that Irving based his “Rip Van Winkle” on Johann Karl Christoph Nachtigal’s German 1800 folktale "Peter Klaus,” in which the protagonist is a
goatherd who encounters some men playing games in the woods and falls asleep for twenty
years after drinking some of their wine.]

But not all fictional time travel to the future occurs through dormition. In 1895 H.G.
Wells published his novella *The Time Machine*, starting the literary trend of time travel
through mechanical means. In Well’s story, the time machine inventor travels into the future,
to 802,701 AD, where he encounters the peaceful, effete Eloi race of humans and the evil,
ape-like, troglodytic Morlocks; the inventor does travel back in time to his Victorian home
where he regales his dinner guests about his adventures, after which he jumps back into his
time machine, never to be heard from again.

And not all fictional time travel focuses on the future. The protagonist in Pierre
Boitard's *Paris avant les hommes* (*Paris before Man*), published posthumously in 1861, is
transported by an impish devil back into the Paleolithic past where he encounters 100,000-
year old cavemen. D. W. Griffith’s 1914 B&W movie *Brute Force* (also known as *The
Primitive Man*), uses the time-travel-through-dormition trope to tell a story about a modern-
day man who falls asleep after his girl friend leaves a party with another man and dreams of
“... the good old days of brute force and marriage by capture!”—a dream in which the puny
hero (“Weak Hands”) invents stone-hafted clubs and the bow and arrow to rescue his woman
(“Lily White”) from “Brute Force” and the hairy apemen who had captured her.

And more recent Hollywood offerings have also featured time travel back into the
past. The 1985 film *Back to the Future* starring Michael J. Fox plays with the “Grandfather
Effect”—the paradox of what would happen if one traveled back into the past and killed
one’s grandfather before one’s parent was born; after traveling back to 1955 in Doc’s time-
traveling DeLorean, the Michael J. Fox character inadvertently prevents his future parents
from getting together and has to go to great lengths to reconcile the pair. The Arnold-
Schwarzenegger-starring *Terminator* movie franchise, which began in 1984 and as of 2019
has spawned five sequels, has cyborgs from the future traveling back in time to put the
Grandfather Effect into effect by killing the mother of the child who will someday save
humanity from extinction. And the 2020 head-scratcher movie *Tenet* features “inverted
entropy” bullets and soldiers that move backwards though time and were imported into the
past by a mysterious cabal.
So, which was it? Was I just making it up when I said that I had time-traveled to predict Martinez’ homer or had I really somehow used a time machine, a DeLorean, or a Sator Square to travel forth and back in time? Or maybe it was all just a dream? Or maybe the memory I have of sitting on the sofa watching a baseball game with my wife is just another phantasm floating around in my brain? Or maybe I had just seen how well Martinez was swinging the bat—he had swatted a homer the day before—and made an educated guess.