Even today, fifty-six years later, I remember perching forward on the sticky, worn-velvet seats of the dark Beverly Theater on Church Avenue near my family’s apartment in Brooklyn, New York, captivated during a shivery Saturday matinee, my eyes wide and mouth slack in amazement as The Creature From the Black Lagoon crept aboard a small diesel-powered river boat somewhere in the South American jungle and then, suddenly, snatched the bathing-suited beauty on deck, leaping with her into the murky deep. I can still see the Gill-Man, a prehistoric monster prodded into our world by self-righteous modern science, powering down into the water with one arm while clasping the woman’s waist with another, dragging her clothed but utterly visible body ever further from air and light and toward me. Sitting in the chilly dark myself, it was stunning. I didn’t know then that this was a “B” movie, cobbled together on a low-brow budget, a double-feature filler the calculating studios produced to conjure a few more coins from the hands of children. The monster’s rubber suit with its silly scales and webbed hands and feet was obviously a movie prop, but so what? That’s what I wanted, movies! Adventure! Excitement! Bathing beauties in peril! I didn’t know then – as the trailer must have announced the week before, as it still does on the Internet – that I was watching “the most amazing underwater photography that the screen
has ever known!” in this “strangest of all science fiction adventures!” I was eight and all I knew was that this was wonderful, and, somehow, deep down, that “they want our women.” Strangely, “they” included me. If there was fear here, it was a fear I coveted because something deep and prehistoric in me wanted “their” women, too. Surely I wasn’t the brainy, broad-chested scientist who strove to keep the “girl” (that’s what beautiful women were called back then) to himself. Honestly, although it is hardly possible, I remember myself being alone in the theater. I know I don’t remember how the movie ended. But I do remember the Gill-Man first becoming enamored of the bathing beauty, a fact recorded wordlessly by an underwater camera shooting up to show her swimming at the surface, her vibrant body half in and half out of the flowing river (of time?) and him swimming on his back six feet below her, looking up to her, matching her movements, following along fully immersed and utterly unseen by her. Like me in the theater. Without knowing it, I must have seen my own future dimly in that watery ballet, a future of unrecognized longing, struggling by stealth and desire against those strong, smart men who clearly owned the world, or at least the dry and lighted world, that I was expected someday to inhabit.

I remember coming out of the theater and, for a long, long moment, standing painfully blinded on the sidewalk in the overpowering sunlight.

I was very lucky. As I grew up, Hollywood seemed always to give me the science fiction movies I needed. In one sense, this is a fortuitous consequence of the development of cinema technology. Just as my tastes jaded, the magic factory always concocted new wonders. (Now that I think of it, I saw Jack Arnold’s The Creature From the Black Lagoon (1954) in old-fashioned 3D, wearing cardboard eyeglasses that scratched the bridge of my nose. Did the novelty of that ersatz reality, and not the longing for the girl, make the movie so memorable? At this remove, I can only surmise that both ersatz realities worked together to allow me a scary-safe glimpse of my future.) But more than the technological development, this parallelism between my and the movies’ growing up reflects both historical happenstance and the demographic fact that I was born at the leading edge of the post-World War II Baby Boom, a member of the most sought market ever. Nonetheless, I still think, this parallelism was also personal. Lucky, sure, but still personal.

A curious but important fact of cinema history is that virtually every major technological development has its first defining application either in science fiction or in fantasy, the larger category that includes science fiction. Sound, for example, arrives in the 1920’s. The Jazz Singer, released in 1927, is often called the first talkie, because, indeed, it was the first theatrically-released movie with recorded dialogue. However, Don Juan in 1926 had recorded music, so The Jazz Singer wasn’t the first sound movie. The first movie to be all sound – sound effects, music, and dialogue all captured at the studio and recreated in the theater, was Steamboat Willie, the 1928 Disney cartoon starring a chipper anthropomorphic
mouse who would later be known as Mickey. And if a mouse piloting a river boat isn’t exactly science fiction in the narrowest sense, it is certainly fantasy. It seems to me now that there is an important historical line, one revealing a crucial shift in American culture, between the happy man-mouse piloting Disney’s riverboat and the Gill-Man sneaking aboard Jack Arnold’s.

Georges Méliès gave us the first narrative film in color, special hand-painted private prints of his *A Trip to the Moon* (1902), very loosely based on the Jules Verne novel; however, the use of color not as mere novelty but as a way to explore the theme of a commercial film found its defining moment in 1939 when *The Wizard of Oz* contrasted the mundane panchromatic sepia tone world of Kansas with the vivid Technicolor world of Oz. (This powerful, thematic use of panchromatic versus full color recurs, perhaps most notably in the red coat in *Schindler’s List* in 1993 and in the contrast between drab and vivid worlds in *Pleasantville* in 1998.) Interestingly, while Oz captivates us visually, the explicit message of the movie is that “there’s no place like home.” Color – the heightened world of the Hollywood movie – is a fine place to visit, but its real value, the film implies, is in teaching us that the best place to live is the real world. Color stands for imagination, which is best valued for its use in training us to deal with the here and now. Given the Great Depression and the palpable approach of war in 1939, this practical turn made sense. And that the pluck of a little girl could galvanize a motley collection of failures to withstand the army of darkness, well, that gave hope. Once armed with hope, Dorothy (her name means “gift of God”) could return to the American heartland and we viewers to the world outside the theater. *The Wizard of Oz* is certainly a fantasy, and, given the rusty plight of the Tin Man, the inevitable drug effects of the field of poppies, the mechanized beauty parlors of Oz, the Wizard’s mechanical self-projection, the role of hot air balloons, and so on, the film arguably fits also within the narrower genre called science fiction.

At the end of the 19th century, Méliès also gave us perhaps the earliest theatrical use of time-lapse photography, the trick wherein a scene is recorded by a slowed down camera so that when the film is played back at normal speed, the motion appears very fast. We see this often in nature films with clouds racing across the sky or flowers budding in seconds. But perhaps the defining narrative use of time-lapse photography is *Nosferatu*, F. W. Murnau’s classic 1922 version of Bram Stoker’s novel *Dracula* (1897). Here the spectral horses flash across the landscape and the slow-moving demon occasionally darts from one location to another thanks to this technology.

The Shuf舛tan process for back projection that allowed the seamless integration of filmed miniatures into the filming of actors was first used in Fritz Lang’s *Metropolis* (1927), a work that for many reasons is also a high-water mark in science fiction film.

And so on from one technology to another.
But to return to 3D: although in various ways it had been used as a curiosity as early as the 1890s, its first commercially successful use was in a 1952 adventure movie, based on historical fact, call *Bwana Devil*. That film has not lasted. But its success motivated investment in *House of Wax*, a 1952 film that began Vincent Price’s decades-long career in horror and science fiction and that also gave most audiences their first experience of stereophonic sound.

The movies that showcased new technologies were, repeatedly fantasy and, more narrowly, science fiction. Look at the list of Oscar winners for Visual Effects (previously known as Special Effects). The list since World War II includes *Mighty Joe Young* (award received in 1949), *Destination Moon* (1950), *When Worlds Collide* (1951), *The War of the Worlds* (1953), *The Time Machine* (1960), *Fantastic Voyage* (1966), *2001: A Space Odyssey* (1968), both *King Kong* and *Logan’s Run* (1976), *Star Wars* (1977), *Superman* (1978), *Alien* (1979), *Cocoon* (1985), *Jurassic Park* (1993), *The Matrix* (1999), and, depending on how one defines the genre, nearly a dozen and a half others. All three nominees currently before the Academy of Motion Picture Arts and Sciences are unequivocally science fiction (*Avatar, District 9*, and *Star Trek*). In other words, the history of film is to an important extent a history of science fiction film. To say that I – along with millions upon millions of others – grew up with the movies is to say that I grew up with science fiction film. In some ways film itself is science fiction.

Overt science fiction film begins with Méliès. Thomas Edison’s Edison Films released a version of *Frankenstein* in 1910. But the melodramatic world of the Saturday matinee was particularly congenial to science fiction. As late as my childhood in the 1950s, theater managers still padded out their playbills with the episodes of *Flash Gordon* (first serialized in 1936), *Buck Rogers* (1939), *Captain Marvel* (1941), *King of the Rocket Men* (1949), and so on. But while the serials were fun, nostalgic in a way even though I knew that they couldn’t really represent my own memories, the feature films were the more important.

In 1954, even at eight, I was thoroughly aware that we (that is “America,” but America seemed like “we” to me) had just come through the Korean War. We (that is, the public, and particularly the young) had been told that, as in World War II, we had won; however, it didn’t seem to me (or, for that matter, to my friends in Brooklyn) that we had. Although we couldn’t actually remember World War II, its veterans walked among us, many of them our actual parents. Germany had surrendered. Japan had surrendered. Korea – North Korea – had not surrendered. Where was the decisive capitulation that signaled security for “our way of life”?

Sitting on the bench in the neighborhood playground, as children will, I tried on philosophy with my friends. How would we know when we were men? Not just pubic – that part was easy enough – but men? Was it ever right to lie, like when a friend’s mother asked if he were really with you when you knew he was off doing something she didn’t want but you and your friend thought was just fine, like reading borrowed comic books. Maturity, truth, loyalty: these were big issues.
And many of our big issues included science and technology. We lived on a busy street. Auto accidents happened all the time. I heard sirens – “someone’s having a bad day,” my father would say with knowing sadness – every night in Brooklyn. Were cars really just wonderful or scary, too? Maybe even wrong, like the atom bomb. Sure, it ended the war and saved lives, even Japanese lives, one of us would say, but does anyone have the right to do that to other human beings? The war would have ended soon anyway, someone else would reply. We shouldn’t have dropped the bomb. How can you know? You can’t. So how can you make a decision, a life-or-death decision, and do it for someone else? You just have to.

We wrestled with those questions, trying on philosophy. It wasn’t a perfect fit, but we felt that, somehow, we had to grow into it.

Godzilla helped.

In Godzilla (1954), the monster is released by the bomb of a Japanese scientist (read Pearl Harbor) and it stomps across Tokyo (read Hiroshima and Nagasaki) until an American journalist (read ordinary G.I.) forces the creature back out to sea (read suppression but not destruction) so the American can end the movie in the company of the scientist’s beautiful, rescued young assistant (read military occupation fostering democracy). If I had thought about it at the time, I would have been grateful that a Japanese filmmaker had provided me with this comforting justification for American action, albeit not a thoroughly comforting view because that filmmaker and I and all the world knew that, despite the bombing of Pearl Harbor, using atomic bombs was a decision, a fraught decision, one that, like the Korean conflict, could be at best, suppressed. Godzilla was still out there, somewhere, under the waves.

Beginning in 1950s, it seems to me that science fiction film has gone through three roughly defined phases. The first phase dealt most importantly with fear. In Them! (1954), American atom bomb tests drive the mutation of ants into huge creatures capable of chewing through houses. Their utter commitment to their own collective purpose and their utter lack of individuality make Them perfect metaphors for the Communists Americans feared. When Their nest is discovered beneath Los Angeles, we have a perverse confirmation of Senator Joseph McCarthy’s witch-hunting. The film industry, unbeknownst to many of us, the film seems to imply, has mutated and is our enemy. Fortunately, the actor who will come to play Sheriff Matt Dillon on the long-running television series Gunsmoke (James Arness), destroys Their eggs with flamethrowers and makes America safe again. But just for that one movie.

In Invasion of the Body Snatchers (1956), the pods are aliens from the sky but they become us – and then replace us – by reforming themselves into our simulacra in our basements while we sleep. Again, the notion that the enemy is single-minded both in purpose and absence of individuality is key. Living in Eisenhower’s America, where “conformity” was an issue and cookie-cutter suburbia was burgeoning, Don Siegel’s film resonated even to my then ten-year old mind.
Not all fears were political. Although one often hears that American monster films of the ‘50s were xenophobic, that is too simple a statement. The Gill-Man was not released or created by a bomb but by unbridled curiosity, and he represented not an implacable destructive force but a thwarted desire for love. The fear that happiness would elude one, that the responsibilities of adulthood would overwhelm one, this, too, characterized those “B” movies. In *The Fly* (1958), the scientist who seeks to better the world by inventing a teleportation device winds up half-fly and trapped in a spider’s web. Even a well intended search for new knowledge can destroy one. That is only “natural,” as the spider web image suggests. But by the time I saw *The Fly*, I was twelve, and biologically destined to seek new knowledge. This was much scarier than *The Creature From the Black Lagoon*.

Between Steamboat Willie, the mouse who has no trouble piloting the riverboat in 1928 to the Gill-Man who can’t stay more than a moment on the riverboat in 1954, America had changed. The expansive self-confidence of Willy, who so often happily whistles, is ground down by the Great Depression and a fear of war that led America to widespread isolationism. But even, in America’s mind, having won the war, we could not return to that same cheerful anticipation. We knew that we had unleashed something terrible – like millions of others, I practiced “duck and cover” A-bomb drills in school – and we knew that our very virtues, our technological prowess and willingness to attack, reflected potentially dangerous traits deep within us, traits that might be aroused for the best of reasons – love, for example – but might only show us to be monsters.

It is little wonder, then, that as the war receded in memory and America grew in strength, movies that dealt with such fears fell away.

Then, after a comparative dry spell, at the end of the 1960s, science fiction film returned and got arty. Instead of “B” movies with low budgets albeit sometimes high concepts, we got philosophical meditations that, beginning with Stanley Kubrick’s *2001: A Space Odyssey* (1968), were often gorgeous to watch. The last image of that film, of the Star Child in its celestial amnion hovering in space above the Earth, is haunting. Where will it lead? The movie doesn’t say, but the last line of Arthur C. Clarke’s novel of the same name is, “But he would think of something.”

For a while, these “A” budget science fiction films, such as *Silent Running* (1972) and *Blade Runner* (1982), films that both look good and prompt us to think, dominated American science fiction and American science fiction dominated world science fiction. *Soylent Green* (1973), in which overpopulation has driven people – appropriately shielded by ignorance – to eat people, asks a simple literal but compelling philosophical question. In some sense, that serious phase has continued, visible in movies like *Minority Report* (2002).

A third phase, however, one that now runs alongside the second, may be said to have begun in the late ’70s with *Star Wars* (1977). Here we took the good looks of the second phase and reached all the way back to the melodramatic serials of
the 30’s and 40’s. While some science fiction films continued to raise questions, like *Altered States* (1980) and *Brazil* (1985), others grabbed ever more of the market share by making visually splendid fairy tales. Given the self-confidence and egotism of America, despite the humbling Viet Nam experience, in the ’70s, ’80s, and ’90s it is small wonder that films confirming what people hoped but memory tarnished found an audience. But by then I was too old. I was perfectly happy to watch “bullet time” played out in the gorgeous *Matrix* movies (starting in 1999), but that sort of simplicity seemed to me “childish things” which I didn’t have to be asked to “put away.” These films were good for a couple of hours, for me, but, for me, not much more.

And then I was honored to be asked by Kathleen Loock and Sonja Georgi, at Frank Kellerer’s suggestion, to give the keynote talk at an undergraduate conference in Göttingen, Germany, in the summer of 2009. Kathleen and Sonja’s students, at Göttingen and Siegen respectively, had studied “American Science Fiction Film” focusing on *Invasion of the Body Snatchers, 2001: A Space Odyssey, Soylent Green, Blade Runner, The Matrix,* and *Minority Report.* I had the opportunity not merely to address this conference but to spend three days with the organizers and the student presenters. They were marvelous: smart, generous, thoughtful, full of hope and high spirits. I admired their scholarly efforts, learned something from each presentation, and learned enormously from them collectively about life for them today, and where American science fiction fits not in America but in their world. But I was surprised that in all these close readings of individual films, of the motives behind them and the system of production that created them, no mention was made of the widespread notion that, to a significant degree, Hollywood is a community marked by Jews. Despite these wonderful students’ extended and collective attention to this group of six films and despite individual students’ attention to individual films, here are some facts, potentially relevant to film analysis, that went unsaid:

Don Siegel, director of *Invasion of the Body Snatchers,* was Jewish.

Stanley Kubrick, director of *2001: A Space Odyssey* was Jewish.

Richard Fleischer, director of *Soylent Green,* and Edward G. Robinson, who played Fleischer’s wise old man character, were Jewish.

And Stephen Spielberg, director of *Minority Report* (and *Schindler’s List*), is Jewish.

But the wonderful young people I met in Göttingen did not seem to look back to see *The Invasion of the Body Snatchers* as an echo of Hitler Youth informing on their families and neighbors or the factories of *Soylent Green* as related to the crematoria of their grandparents’ youth or the totalitarian illusions fostered by the machines in *The Matrix* as akin to Joseph Goebbels’ propaganda factory or *Minority Report* as censorship in the name of a fascist state. These modern German young adults, who certainly are fully aware of those matters of their own national
identity, in reading American culture, even American culture of the 1950s, did not address these fearful parallels. Why not?

Consider the typical American response to *Them!* at its release in 1954 and even thereafter. The recency of the McCarthy witch hunts and the threat of Soviet Communism with its explicitly imperialist ideology and atomic weapons made interpretation easy. But those immensely strong, suddenly destructive, six-foot tall, black ants, breeding under Los Angeles, arguably resonated so powerfully because they also tapped into America’s constant, albeit often unconscious, awareness of racial tension. Ants, the archetypes of mindless industriousness, could have been seen just as easily as African American workers, commodified by white-owned industry, yet lurking, always near Anglo-America, often unnoticed, potentially violent. 1954 was, after all, the year of the Supreme Court’s landmark racial integration case, *Brown v. Board of Education*, and in some sense the explosive opening of the modern Civil Rights movement. Yet despite that, other, more consciously pressing matters, matters that had been more recently terrifying and more widely discussed, took up most of the interpretative space and motivated the most searching discussions that followed from this film. As much as race was a constant question in Americans’ mind then (and still today), it was not what the film seemed most pressingly about, and only becomes so when explicitly raised.

Among those German youths whom I listened to and learned from, the Nazi past is also, without doubt, widely felt, but it seems that, unless explicitly raised, other issues – today’s issues – seem more pressing. Science fiction film, it seems, works so well for these engaged young adults right now precisely because science fiction film, in its makers, viewers, and implications, is no longer particularly American but has become just science fiction film, because, as those students proved, it is worldwide and trains us to look, feel, think, appreciate, and perhaps improve the world we share right now, and the one we all will have to share tomorrow. For me, because of those students, both what they did say and what they did not say, I have a renewed faith in my life in science fiction film. Vielen Dank.