

*SEEING BOTH*  
A Memoir of Chances

By William M. Goodman

© 2023

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*These are sample pages from the full, published book. For the full book (eBook or paperback), see: <https://www.amazon.com/dp/B0C84D61V5>*

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*I thank all the real people who participated in the real events, recounted herein to the best of my recollection, which led me to my present moment. I especially dedicate this to Kathryn, Rachel, Alek and Kristen, who have all helped the present moment to be pretty darned good. Some names have been changed for privacy, and exact wordings of old conversations have in some cases been reconstructed. Any perceived slight of an individual or group is unintentional.*

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## Chapter 1: Chances I Had to Take

**OCTOBER 1977. WATERLOO, ONTARIO. 75 MILES WEST OF TORONTO.**

I looked wistfully at the patio chairs on the balcony, outside the kitchen window. They appeared more like shadows, and it was still too early and too nippy out there to sit for breakfast. I watched as light advanced on the stand of trees at the edge of the property.

Kathryn and I loved this apartment in Waterloo, which we moved into a year earlier, following our long-distance, summer romance. We'd lived 140 miles apart, by train. But before long, we'd be moving into Toronto. My plan for today was a scouting expedition. I'd take a bus to the big city, "T.O." as some called it, and start looking into apartments and jobs.

We currently lived on the second floor of what's now a registered Heritage House: *Italianate*, ... *buff-yellow brick*, 19th century. More than its pedigree, we enjoyed its large garden and extended lawn. A porch wrapped from the house's south (front) end to along its west side, and our balcony capped its entire west portion. The balcony, though, looked like a slap-dash afterthought to the house's main architecture—unlike across the street, in a similar house, which had a proper deck with a wood railing up there. But their version was squeezed to being only above the front doorway.

Kathryn came over and joined me at the kitchen table, and handed me a Toronto street map for my day's excursion. Her eyes smiled through her large, round glasses with a brown frame, coordinated with her long, reddish-brown hair. I liked the idea of moving closer to Toronto's big bookstores and some meditation groups we'd discovered. But at this moment, I was feeling fuzzy about what our plans and objectives were, exactly, for our move.

After Kathryn left the table, I looked back at the line of trees, getting brighter with the advancing light. My mind started to race. *Man! I wondered; Will I ever get settled down? My life's been a wild ride for the last seven years. Now what's in store?*

You have probably heard about "seven-year cycles". But if you've luckily survived a few (and I've lived ten of them so far, as I write this!), some can be relatively uneventful. But not the one I'd just completed.

Still staring beyond the balcony, I flashed back on the previous seven years or so. I remembered my uncertainty when leaving the United States, due to opposing the Vietnam War. I never knew during the interval, if I could ever return. Or if I could ever visit my parents again at their home, or show Kathryn my home town. I remembered the joy I felt when, only recently, I could finally visit home, thanks to President Carter's pardon.

I remembered how seven years was plenty of time for my first marriage to break up, and for me to grieve that loss. But still with time left, for me to meet Kathryn, and for us to move in together.

In seven years, I forwarded to my mother eight or nine addresses for me (spread over two countries—a state and two provinces) to write in her address book. All addresses became obsolete, and had to be crossed-out; so, some entries were just on paper scraps. I'd, meanwhile, held at least 10 different jobs; and possibly more, depending on how they're counted.

And, finally, it was enough time to have just completed a university degree, nine years after I'd left high school.

I looked down, then, at the Toronto map on the table, and concluded my reverie. *So, now what? I'm already 27 years old. And, sure, I finished my degree, but it's in Philosophy. Who's hiring philosophers?* My latest part-time job wasn't much (office-cleaning for a cable company), but at least they had a piano, which they let me play on after hours. Or, maybe no one knew that I was doing that. *I'll definitely miss being away from a piano again,* I thought. *"So, what's next? Will I finally be more like a 'normal adult'?"*

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My feelings about a career in philosophy were mixed, even if I could have landed one that day. Philosophy gave me a language or lens that I've used throughout my life for approaching the world. It's the perspective of reason, and logic, and critically assessing evidence. But for me, sometimes, an ideal of rigorous deduction—like *If this, therefore that;* or *It's either that or not that, and can't be both*—feels constraining. The events about to happen on that particular day, and my responses to them, were not exactly logical.

Reflecting now on my life, I believe it is possible to respect logic, yet also be open to intuition and spontaneity and meaningful coincidences. Trying to balance both, it's not always clear what on earth to do. But that's a chance, I've felt, worth taking.

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So, I finished my breakfast that morning, and inserted the Toronto map into the sleeve of a folding clipboard I'd take with me. It was only a short walk from my apartment to catch the local, King Street bus to Kitchener, which is Waterloo's "twin city". I tried looking out the window during the bus ride, and not thinking too much, and even started feeling a positive sense of anticipation. In Kitchener, I bought an inter-city bus ticket to Toronto, and waited.

Finally, the bus came and allowed boarding. The boarding area smelled of exhaust, and I braced for car-sickness on the trip.

But when I got off in Toronto, I thought of a perfect antidote for any lingering queasiness. (Not to mention, a way to procrastinate from job searching.) I headed directly to my favorite bookstore, the Fifth Kingdom Bookshop. Located downtown, near the provincial legislature, the store occupied a detached, 3-bedroom, Victorian house. The light blue color tones of its awnings, window sills, and outer entrance door made me feel welcome.

When I entered, I started to browse, in no particular order or section, for newly-arrived books. I eventually made it, as I often did, to the Eastern-spiritual-teachings

section. And I'd stop by bulletin boards, to peruse interesting postings: *Gurus in town; meditation retreats; Tarot readings*; and so on.

That's when I spotted a hand-written notice on a bulletin board: "Buddhist monk would like someone to help him with his English writings." *Wow!* I thought. *That could be exciting.* I'd read some books about Buddhist and Zen teachings and practices. And I certainly liked to write. *What if I could be paid for a project like this!?* I scribbled down the monk's phone number from the posting.

Feeling almost giddy, I headed back outside to look for a pay phone, to make the call. I knew I had sufficient change. It was not too hard, back then, to find a pay phone, and one was reasonably close by. Its one slot accepted quarters or nickels, too; but I placed in just one dime, and began dialing after I heard the tone. As I was getting close to completing the number, I felt a bit anxious.

Someone answered the call, in a quiet voice, after a few rings. I explained that I'd seen their job notice on the Fifth Kingdom's bulletin board, and that I was calling to apply. The speaker acknowledged that the posting I saw was his. He then suggested, "Why don't you come over for tea? I'm not far from the bookstore." I accepted, and he gave me his address.

After I hung up and stepped out of the phone booth, I took the Toronto map out of my clipboard, and crinkled it open to find my location. From there, on the map, I searched and found my destination. I figured I could walk there in about 15 minutes.

The walk, westward on Harbord Street, passed mostly by store fronts and some light-industrial-type buildings, close against the sidewalk. I enjoyed the change of scene, when I turned south onto Markham Street. Trees lined the street on both sides, and brick houses, of mostly two or three storeys, were set back nicely from the road. Each had a small, but obviously well-appreciated, square lawn. Many were landscaped or gardened, or had an extra tree or two.

I slowed my pace after I'd crossed the final side street on the route. I felt my heart racing as I got closer to the monk's apartment, so I took some deep, slow breaths to center myself. *How should I describe my background?* I wondered. Images of covers from my book collection, back home, came into view, as I mentally scanned the collection. One caught my attention: the yellow, paperback book of parables: *Zen Flesh, Zen Bones. But is he, necessarily, Zen Buddhist?* I wondered, mindlessly.

That is when the second-guessing started. I asked myself, *why am I even in Toronto, let alone seeing this monk? This feels different from just going for a job interview. And why move, anyway, from our nice apartment and friends, back in Waterloo?*

I took another breath. And paused.

Fortunately, no one was walking behind me.

Then I remembered the journal I'd been keeping for awhile, and my recent entry, about recurring feelings of lack of direction. About how I felt it was time for what philosopher and spiritual teacher George Gurdjieff called getting a *shock*—that is, a disruption from old habits, to hopefully prod effort and advance self-development. Sure, I'd collected and read lots of “spiritual” books, over

the last few years. But I was feeling that just reading them, on my own, was becoming superficial. I had to kick-start, somehow, what Gurdjieff called starting *a new octave*.

Suddenly, it occurred to me: *If this guy really is a Zen monk—aren't Zen monks famous for giving their students "shocks"? Like hitting them on the head if they miss a point? I sure hope he doesn't do that to me! OK. Here goes.*

I walked the last few steps on the sidewalk to his house. I confirmed its street number, and knocked at the door. The person answering just directed me down some stairs. That led me to what was, then, the practice center for the Zen Lotus Society in Toronto. It was also the apartment of the Venerable Monk, Samu Sunim (or "Sunim", for short).

Sunim greeted me kindly, in person.

*My Gosh!* I effused to myself. *He's the paradigm for what I've imagined a 'Buddhist Monk' should look like.* I stared, too blatantly, I'm sure, at his shaved head, flowing gown, and serene face. And especially, his watchful eyes.

Sunim invited me to sit on the floor, across from him at a low table. When we had settled, he quietly poured tea into two hand-thrown, ceramic bowls. In no hurry, he finished pouring, then handed me some draft pages from that book he was writing—the one he was looking to smooth the English writing for. He gave me some time to read them, and conveyed no clue how long I should allow myself before I looked up and said something. They were short Zen tales, about the exploits of some interesting monk.

At last, Sunim asked me a question. “What is your background?” I told him about the kinds of things I was reading and about my spiritual interests, and about my plans and reasons to move to Toronto. He listened very attentively, without interrupting. Then, he slowly lifted his bowl of tea, with both his hands, towards his lips, paused, and said to me, “You should work with your hands.” The moment lingered for awhile. Then, he resumed lifting the bowl to reach his lips, and slowly drank. Finally, lowering the bowl a little, he looked at me for another long moment.

I couldn’t say for how long.

Eventually, he got around to mentioning his requirements for an assistant with writing: “I need someone,” he said, “who has lived and worked with Zen practices. I cannot use someone who will only write about them.”

I’d kind of figured that out, anyway, just from the way he drank his tea.

We sat silently a little longer, then bade our goodbyes. All I can remember, next, is being back outside, on the sidewalk, and feeling strangely positive. Yes, he’d turned me down for that cool writing job. But that seemed insignificant. I felt Sunim had just given me something more important.

*What if, I wondered, “I somehow pay attention to his message? ... But what would that actually mean?”*

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I learned, years later, that Sunim's practice center in Toronto had reactivated not long before I met him. If I'd come to the bookstore much sooner, he'd still have been finishing a 3-year retreat he was on. There'd have been no posting on the bulletin board. Sunim was trained and ordained as a monk in his homeland, South Korea, in the late 1950's, but left to avoid conscription into the military. He made his way to North America, and founded Zen societies and temples in several U.S. and Canadian cities. I've learned that, for his students in meditation practice, including two I met personally long after, he could be quite demanding. Curiously, though, I never sought Sunim out another time—not even during periods when we both lived in Toronto. I've always felt that, that day, he offered me the message he intended for me.

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After leaving Sunim's, I walked back to Harbord Street. I hoped I could sit down somewhere, and collect my thoughts. On one side of the sidewalk, a copy of the day's newspaper was visible through the glass door of a newspaper box. The dime and nickel I inserted into the change receptacle, above the box, clanged as they hit the bottom of their container. I opened the glass door and reached in for the paper.

I walked on further, until I came to a small restaurant. It was just the kind of "mom and pop" place where I liked, in those days, to hang out with a newspaper and get a Coke. The room's one server had cleared a small table, and I walked over to it. I pulled out a chair, and pattered to make room for spreading out the paper on the table, by sliding a collection of plastic, glass, and stainless-steel containers to

one side. I teased out of their dispenser a supply of those little, folded napkins that never seem adequate if a meal is greasy. Then, finally, I opened up the newspaper to the Help Wanted section.

The server was now busy with another customer.

Through all this, my mind started racing again: *When I left home this morning,*” I thought, *I just wanted to start searching for a stable job—a part-time one, if possible. It would be great to find something challenging. But I also want free time for my reading and writing and other interests. What am I supposed to do now, after hearing Sunim’s advice? What job could I possibly find in this newspaper that has anything to do with ‘using my hands’?!*

My eyes glazed over as I thumbed through the classifieds for Office and Sales-Help jobs. Nothing seemed promising; and I was starting to feel discouraged.

Then something jumped off the page.

Just to the right of a column of, maybe, eight advertisements for babysitters and home companions, I saw a tall display ad for DeVry Institute, and their Electronics Technician Program. *That would be a stretch,* I thought, *for how to apply Sunim’s advice—but don’t technicians fix things with their hands? And they also use analytical skills. I’d like to analyze some stuff, too, in my work, if I could. ... Could this work? ...*

At this point, the server came over to my table, and greeted me politely. She appeared to be scouting for a free spot on the table to put down a cup, if I wanted a coffee. I ordered a Coke, instead. And a bit to eat. Flashing back

to images of the bus ride from Waterloo, and of seeing Sunim's ad in the book store, and of walking to meet him, I realized I hadn't eaten since early breakfast.

Awaiting my plate, I folded the newspaper length-wise to leave some room for it, and figured I'd read the headlines and some editorials. If I could concentrate.

But that crazy idea wouldn't leave me, now: *I'm going to sign up, this very day, for that Technician program!* I resolved, boldly. Then, sheepishly, *How in Heck will I explain this bright idea to Kathryn, back home?... I'll have to call her after lunch.*

Whatever that lunch was, it was prudent to have set aside the extra napkins, for wiping off my mustache when I finished. I folded up the newspaper for carrying, and asked the server for the check. The change jangling in my pocket that morning was coming in handy. Even after paying the bill, and leaving a tip, I still had change for the upcoming phone calls.

When, after leaving the restaurant, I found the phone booth that I'd used to call Sunim, its glass windows glistened in the sunlight. I called DeVry's number from their ad, and set up a meeting with the Admissions department. I figured I'd listen to their pitch, and ask some questions. And probably, I'd enroll.

Next, I called Kathryn. I felt a bit nervous, wondering how to announce this plan to her. But I started with telling her the great story about Sunim. And then I assured her that with student loans and a part-time job, I could make this work. She generously agreed to let me try.

Back outside the phone booth, I unfurled my street map another time, to find a route to the institute. A short walk, I discovered, would take me to Bloor Street, and stairs down to the subway, which runs below that east-west thoroughfare. In the subway station, I waited briefly in a line to pay my fare, and to get a subway token for the return trip. I'd be taking that train a lot, once my program started; but now, off hours, I was glad it was easier to find a seat. I transferred at Dufferin for a bus-ride north, and then, bombarded by street noise, walked the last few blocks west on Lawrence Avenue. All the while, I tried to imagine what DeVry's campus looked like.

If it could be called a "campus". There were no lush spaces, or ivy, or ivory towers, and it was surrounded by parking lots, and industrial-type buildings (which it was, too), and a thoroughfare. Its name was spelled out in big letters on top of its plain, two-storey expanse, which was set back from the road with a patch of lawn. I walked up to the entrance, and found my way to Admissions.

DeVry Institute in Toronto, in those days, was quite successful, and unabashedly for-profit. They knew the connection between students getting approved quickly for student loans, and the school's increasing its enrolments. I'd barely talked to a first greeter and skimmed through some brochures—and pretty much signed up then—before being directed to a student-aid counsellor. She was very reassuring, and her approach reminded me of storefront tax services: She had all the right forms ready to go, and coached me, then and there, through the steps and questions to fill them out. I'd still have to come back with

info about my employment history, and so on; but I walked out feeling the loan was all but approved.

Only once I left the building, and then reached the sidewalk, did I feel a bit anxious. Or maybe prudence was trying to get my attention. I started wondering: *What if I can't get a part-time job to afford going here? It's a private institution; so, definitely not cheap. And what if the bank doesn't approve my student loan, after all?*

In the end, I felt it was worth taking the chance. As I did that morning, on the way to meeting Sunim, I figured I was ready to plunge in for a Gurdjieff-style *shock*, to begin a *new octave* in my life.

*Whatever that means in real life*, I resolved, *Lets go for it!*

Kathryn supported this sudden career move. But justifiably, she hasn't let me forget, even now, what I did with equal impetuosity later that same day.

Part of my goal coming to Toronto that day was to start scouting for an apartment. We didn't expect that we'd actually need it for a couple of weeks. But by the time I'd changed plans and met with Sunim, and then gone to enroll at DeVry, the shadows were getting long on that adventure-filled day. I stopped to reflect somewhere, and pictured all the apartment ads, buried unread in the newspaper I was still carrying.

*Maybe I should just go home*, I sighed to myself.

I felt exhausted, contemplating the steps that that choice would require: Transit to the Toronto bus station, and doubtless, having to wait there; taking a bus to

Kitchener; and finally, in the dark, mission unaccomplished, taking a taxi to Waterloo. *I could stay in Toronto. But I'll need a place to stay.*

Kathryn and I lived rather hand-to-mouth, in those days. And we had no credit card. The thought of booking into a hotel that night triggered my next—and dumbest—brainstorm of the day: *It's almost month's end, I thought. What if I can find a place to rent, starting tonight? Then I'll just move in.*

You don't get much in an apartment if it's findable and can be rented immediately, and requires no credit checks or references. I thought it was convenient that the place I found was right on the main subway line, Bloor-Danforth, and I felt very impressed at its having a colorful, 24-hour fresh-food market nearly across the street. (I don't recall that we ever bought anything there after midnight.) But somehow, I missed seeing the traces of blood on the building's poorly-lit stairwells, which shocked Kathryn when she first saw the place. Or hearing the loud arguments and yelling which sometimes came from that direction. We came to suspect it was drug deals going wrong.

For myself, I was most shocked about something else, that first night I spent there. Not because I was alone, and hadn't packed a change of clothes, and had to sleep on the floor. But because of a large army of cockroaches (it may have been only two or three bugs, but to me it felt like at least a battalion!), which crossed my bare, outstretched arm on the floor that night. I felt horrified. But it didn't occur to me the next morning to try getting out of the lease.

Below that apartment was a bakery, whose wares could well have been very tasty, even to non-insects. Kathryn and I weren't ever tempted, however, to take the chance of buying something there.

After Kathryn more-or-less forgave me for leasing that place, we did subsequently enjoy together, fairly frequently, meals at the Detroit Eatery down the road a bit. It had one of the world's best hamburgers: the *Detroit Burger*. I loved the overtones of Greek spicing in the burgers. And those who wanted, could add peameal bacon and cheese. Another slight positive of the area was the Moon Cave Restaurant. We took some friends there, from Waterloo, to appreciate its unusual dark, and stalactite-themed, interior.

As soon as possible, however, we found another place. It was in a nice, though small, basement apartment near Toronto's large, urban park, High Park.

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After I'd rented that infamous apartment on Bloor-Danforth that day, I found a place nearby for some dinner. I settled myself by taking a few slow breaths, and began reflecting on the day. In particular, I contemplated the chances I was taking, seemingly out of the blue, for my debt load and my career. This made me recall the first time in my life that I had to consciously take what seemed to be a big chance. That happened in 1958, when I was 8½ years old.

My father, Dr. Merrill Goodman, had a veterinary practice, with its office in a building behind our house in Washingtonville, New York. He treated dogs and cats

from our small town, but especially liked to call on farms around the region, and work with larger animals. I didn't realize in his last months how gravely ill he was. That's why he'd hired a young, newly-graduated veterinarian to help with his practice, and meet his clients. I also didn't realize that Dad was grooming Dr. McBride to likely take over his practice before very long.

One day, Dr. McBride was preparing to make a service call to a client's dairy farm. He saw me as he loaded something into his car, and asked if I'd like to join him on the call. I always enjoyed accompanying my dad on such outings, and felt happy to be invited.

We arrived at the farm, and the adults went about their business, leaving me free to explore. I didn't go far before encountering a brown, tabby kitten; and she noticed me, too. She bounded over, purring loudly, and let me pick her up and hold her. I, of course, immediately fell in love. I'd never bonded that way with a pet, before, though our family had had two dogs by then: Our first died when I was younger; and, in those days when dogs could run free, our second kept running away, and finally never returned.

The farmer noticed me with the cat, and called over to me from a little distance: "Someone abandoned her by the side of the road, there." I gathered this was not unusual on that stretch of country road. "Would you like to keep her?" he asked. "Yes! Please!" I jumped at his offer.

I immediately gave her the name "Purr". And, yes.... Go ahead, and roll your eyes at that choice.

Years later, I learned that my dad was not pleased—either about the farmer's offer of this pet, or Dr. McBride's

not trying, somehow, to intervene. Knowing my mother could soon be a single parent, Dad hated to add this new responsibility for her.

But Dad said nothing of this to me, when I saw him. He was lying down, facing me, in the book-lined room we called the study. The room had stained-glass windows, and old maps (reputed to be authentic Civil War strategy maps) papered on the wall. The green vinyl couch that he lay on contrasted with the vibrantly colored, Afghan, granny-square crochet blanket that supported his head.

My mother talked to him first, about Purr, before I entered the room. I felt nervous coming in next, and awaited his verdict, on whether I could keep the kitten.

He didn't give me a Yes or No answer. He just told me. "You have to put her outside tonight. And then we'll see." I protested, "But what if she doesn't come back?!" "That's the chance you'll have to take," he answered, calmly.

That was one of my last conversations with him.

Wonderfully, Purr and I passed this trial by fire. After a night of explorations, she returned to our door the next morning. She lived at our house for the rest of her 18 years.

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It's because of events like these that, as much as I love logic and rational, *if...then* deductions, I don't feel that, alone, they tell whole story for understanding life or the world. That day I got the kitten, I had to leave her outside

that first night—to see if she was mine. Did she return because she was mine, or become mine by returning? Logically, it's a riddle. But what mattered was I took the chance to find out. And, through that, I found that in this case, both were true.

I've rediscovered that same lesson many times in my life—that seeing a *Both* perspective can often make more sense, and open more possibilities, than forcing a simplistic, either/or conclusion.

Stemming from interests in chance, another theme in this memoir is *risk*.

Risk is the chance of something happening that's undesirable or unexpected. There was a chance, when I enrolled at DeVry, that I wouldn't like working in electronics, or do well in it; and then subsequently, I'd struggle paying off my student loans. It's certainly reasonable to be cautious about risk. But sometimes, taking good risks can be a secret of success. 12 publishers rejected, prudently, a book proposal about a young wizard called Harry Potter. Finances and reputations are at stake, when signing up and promoting a new author for a novel project. Yet, one publisher accepted that risk, and took on the project; and they profited from it famously.

Through much of my own career, I've tried to understand chance and risk, and have taught, written, and consulted about it. In my own personal life, I've taken some path-changing chances, that could have gone very 'south'. Yet, sometimes, you just have to go for it. Many of my life's chances became opportunities—with no small

thanks owing to luck, and to countless many who have been there for me along the way!

To illustrate, let me start back at the beginning.

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## Chapter 12: Jobs, Academics, and “Big *It*”

**FALL 1981 - EARLY 1990’s.**

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Meanwhile, ....I received another incentive to enrol for full time graduate school at the University of Waterloo in the fall. This development proved pivotal to my subsequent career, so I’ll take a few extra moments to explain some features, in a bit of detail.

I’ve shared about my logic professor, Rolf George, who mentored me when I was still an undergrad. When he heard that I was taking courses again, and about my computer interests, he considered applying for a small research grant. He asked if I’d like to develop a computer

model that related to one of his research specialties. I felt excited at the prospect, and liked that he'd pay me from that grant funding if it came through.

We got together in his office, over a coffee, and talked about what he had in mind. And we hashed over what could be feasibly accomplished in a relatively small project.

Rolf had become, by then, the acclaimed author of an English translation of a book by Rudolf Carnap, called *The Logical Structure of the World*. Some viewed that book as a cornerstone of a theory called Logical Positivism. That theory says: All we think we know about the external world, like various "objects" and their properties like "colors", can all be reduced, ultimately, to just impressions we sense directly. Then, our minds cobble together, logically, our familiar view of the world ...

*...But don't worry, Reader, if you're not sure what that means, exactly. You're hardly alone.*

Let's just say, as an example, that when we think of "green", we're just combining what's common in all our past sense impressions—from those times when we were looking at things like grass, leaves, mint-flavored mouthwash, potted cactus, and (if it's legal where you live) marijuana leaves.

By using logic symbols and proofs, Carnap had tried to show how such a theory was possible. But many philosophers thought that Nelson Goodman (no relation of mine) had refuted Carnap with a devastating *counter example*. That example seems to use Carnap's logic, yet it clusters experiences together to define "Green", for example, that *do not really share any one common color at all*.

*If the theory can't even come up with one color dependably, critics asked, how could it possibly construct the whole world? ....*

So, Rolf summarized that famous problem to me, along those lines, while I flipped through the pages in Carnap's translated book, which Rolf handed me. Then he asked me, "Could you write a computer program to actually implement Carnap's opening logic steps in his book? Then, we can *see for ourselves* what the program does, if we use Nelson Goodman's so-called 'counter example' as inputs."

I loved the challenge, and felt honored that Rolf had asked me. I accepted it right away.

I was very lucky, when starting that project, that I was still working at the computer camp. The Logo language used there could do far more than just the *turtle graphics* we introduced to the kids. TI's version had some nice, additional features, but the Apple II's was even more powerful, and could print out lengths of program code on regular-sized paper. So, all that summer, during breaks and over lunch hours, I worked on Rolf's challenge, using a computer at work.

I had a Eureka! moment when I realized that Nelson Goodman's argument had a "bug" in it. He didn't view Carnap's logic as *steps* to make things happen in a certain order, the way computer software does. So, the computer program I wrote wasn't fooled by Goodman's test case, and danced around it.

It's like someone complaining that the assembly diagram for a new barbecue is mistaken, because if you tried to mount the *lid* shown in the picture first, it would

fall down. Well, Duh.... If a person followed the steps in order, and assembled the *bottom before the top*, he or she could be enjoying barbecued hamburgers by now.

That finding of mine suited beautifully, I thought, my inclination to see a *Both* perspective in things: It didn't surprise me that focusing just on the printed, logical formulas for Carnap's model (its *structure*), while ignoring *procedures* to apply them, would not be sufficient. Just as in good assembly instructions, the pictures of the finished product, and the step-based instructions should work hand in hand.

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As you can imagine, Dr. George was thrilled when I conveyed those results to him. He encouraged me to take the analysis further, and make it a focus for my upcoming Masters Thesis. That would come to include my software "solution" to Goodman's challenge to Carnap.

When I'd returned to academic studies, intending a focus on education, I never anticipated my thesis would end up being on Carnap and logic. But I also sensed that my "structure *with* procedure" idea wasn't really that different, after all, from the educational idea of *learning by doing*, which is what I encouraged of children at the computer camp, using turtle graphics. For my own learning, too, I've always felt that amassing theories is not enough; you need experience in making something actually happen.