

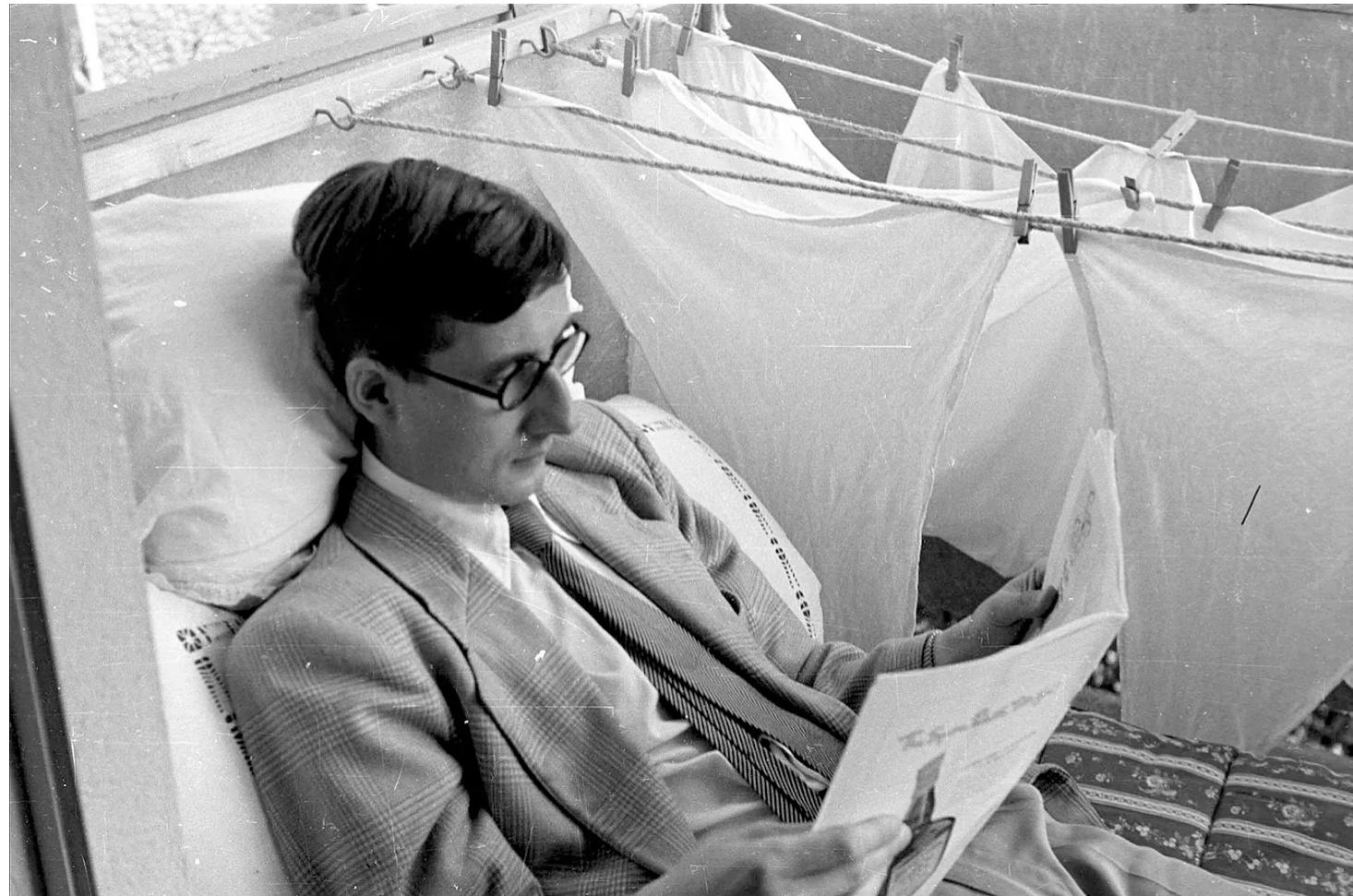
I wrote to Freeman Dyson 15 years ago; he responded nicely

and reminded me to be respectful to everyone.



DON DOS PASSOS

APR 24, 2023

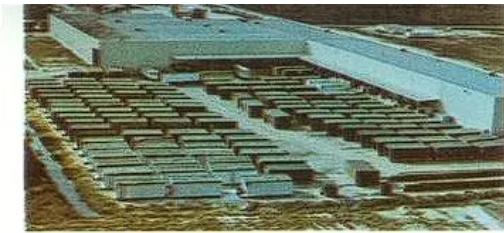


A couple years after I graduated college, in one of the months during the [subprime](#) mortgage crash in late 2007 or early 2008, I wrote to [Freeman Dyson](#), the theoretical physicist who worked at the Princeton Institute for Advanced Studies til his death in February [2020](#) at age 96.

Dyson, being one of the premier futurists of the 20th century (and 21st), was in his own league when it came to science and technology [ideas](#). He didn't need to be a sci-fi writer because he defined it with real science. His papers rival, when not surpassing, some of the best hard sci-fi works. On the titles alone. Dyson spheres? Sold.

The subject of my email to him was modular housing- that is, removable pods from apartment buildings that are like Carvana, but for container-like condos. Why?

It is not without precedent. In the 1960s, Disney World (the one in Florida) experimented with this idea with their EPCOT planned community (now a permanent resort), prototyping units that were removable:



**MODULAR
MAGIC
IN
CONSTRUCTION**



The exciting innovations Walt Disney envisioned when he said Walt Disney World would be "a showcase to the world for the ingenuity and imagination of American free enterprise," are nowhere better illustrated than in construction of the first two hotels. Here, steel-framed unitized or modular construction has been given its first major showcase. All 1500 rooms of the Contemporary Resort-Hotel and Polynesian Village were fabricated by United States

Steel at an assembly plant three miles from the hotels (top photo), trucked to the building site, and lifted into place by giant cranes (illustrated at the 14-story A-frame Tower

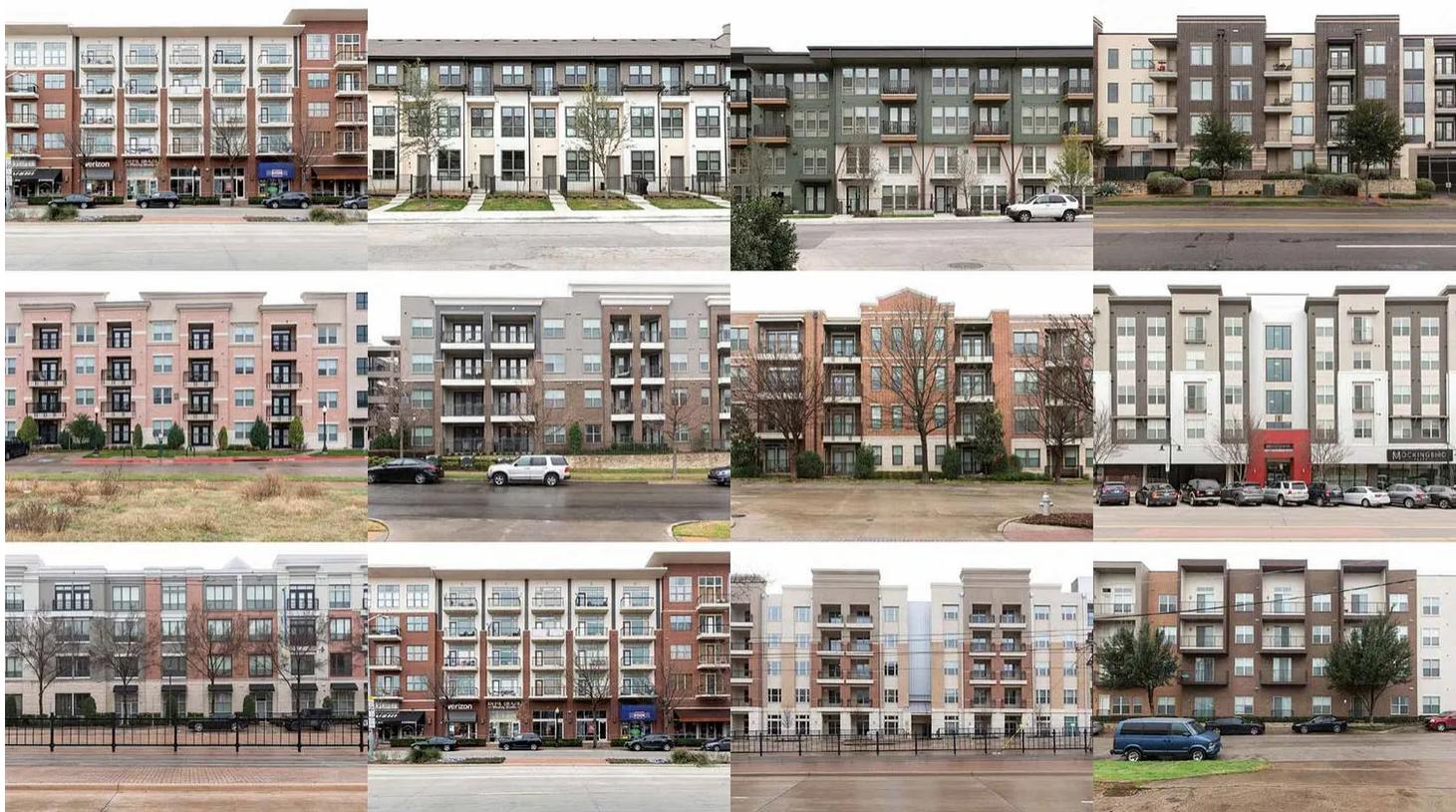
Building of the Contemporary Resort-Hotel). Before leaving the on-the-job assembly plant, these light-weight steel rooms had been completely outfitted—walls covered, bath fixtures installed, mirrors in place and lights ready to be "plugged in."



“As with the apartments, the houses would be built to be easily changed.”

The difference in my idea, was/is that people should be able to own their pods/container homes and move them to other complexes & cities.

The cost of housing has increased; yet the uniqueness of homebuilding is not much more special- in fact it is already bland:



My reasoning was/is, that if consumers care less about what they live in and more so, *where* they live, moving is an added expense, thus rather than move all the junk into and out of a U-haul, why not move the entire, standardized-fit container condo? Then use a crane or elevator to hoist it in a new complex? This presumes the container would be no wider than an 18 wheeler, or doubled up with a easement/doorway mod.

Japan's solution to the housing crisis is to [build](#) (and [rebuild](#)) more homes, which is why they have less than [1% homelessness](#).

While their homes are only designed to last 20-30 years, improvement in earthquake preparedness in newer constructs makes that an added benefit. In the U.S. homes are considered one, if not the only main-long term investment. But like a computer ATX case- the structure of the building could outlast the motherboard components with newer fixtures-cabinets, appliances, etc. I would add that this housing development model could work, if more savers were interested in putting less investment in the value of a home and more into other things- such as 503 savings, 401ks, and investments other than just real estate-a diverse portfolio-to not put all eggs in one basket. The reason is that real estate is overpriced-and there are fewer [homeowners](#). In many ways, having inexpensive, open source [cars](#) and modular homes would both fiscally and literally increase social mobility, by reducing the cost of aftermarket component replacements. The open source car idea wasn't mentioned, but much of those ideas were communicated in my email.

Freeman Dyson responded favorably- I may still have the email in an .mbox file if I backed it up on an old hard drive, but with reaching maximum gmail storage over 10 years ago, I did lose some of my old emails (also because once in a blue moon, at least around that era, a few years later, around 2011 or so, I deleted a lot of emails, not just to reduce clutter but to start “anew.” While I probably wouldn’t have deleted that email had I the foresight to spend a day going through memory lane and sorting through what I wanted to keep, being a hoarder was also part of the problem, hence the clean break.

He mentioned that he once worked with [HUD](#) on a housing consultancy, and encouraged me to pursue this idea. I admit this encouragement was very satisfying, as I felt that pitching my ideas to mediocre scientists prior to that garnered mediocre responses. Great minds think alike! That said, the reason I am writing this post is also to come to terms with a bad habit of mine.

When I composed the email, I identified with Dyson as a fellow *academic*. Not as an entrepreneur or salesman- which I was very suspicious of at the time, equating many to snake-oil sales. Dyson, being brilliant, recognized my dismissive tone towards the business sector (ignoring my partisan obsequiousness to him), and reminded me to be nice to everyone, and to treat everyone with respect. He handled my green email with extraordinary grace and responded with a very instructive, and informative reply.

I admit I haven’t always learned from my mistakes, although I think I am getting better.

In 2018, Dyson [published](#) “Maker of Patterns: An Autobiography Through Letters,” letters “he sent his parents between 1940 and 1980, letters in which he discloses quite unscientific aspects of his life—including the joys of romance, marriage, and fatherhood, as well as the trauma of divorce.... Dyson never lets readers forget that, for all of their exceptional intellectual gifts, scientists live human lives defined more by family ties and friendships than by laboratory results.”

While my email may not have been the most memorable, who knows if he left it to his heirs or a trust to publish at some pre-determined date.

Why didn’t I follow through with the idea at the time? Well, the financial crisis was probably one- I was living in Chicago at the time; a year later, I moved back in with my parents. A number of things happened within a few years, that a large capital investment seemed very farfetched. Knowing how and where to pitch the idea to actual architects/planners developers seemed like a job for a pro, which I didn’t see myself as one. But the idea itself always seemed technologically sound- no gas connections though- all electrical (not that I mind if you use it in your free-standing structure).

How to connect water pipes and electrical? That was a minor detail in a much more ambitious concept. Obviously, it would involve disconnection prior to container removal, but having an automated or easily accessible way to manually unscrew the connections (like a large wrench with huge torque and does it in one “lever pull”) could make that much simpler for a 1-2 man job. “If there’s a will, there’s a way”. I also became interested in the tiny house movement shortly after, which appeared to be feasible too. But eventually, I outgrew that and settled on preconstructed homes- as I needed a home for myself.

Looking back, it probably could have been a viable business idea, although many zoning and municipalities would probably have some issues with it. Might the future reconsider if it were tried today? Be my guest! :) Just ensure your homes aren’t proprietary designs that are not made to fit other modular complexes- that is- if two architects are both building modular homes- the complexes should have a standard condo size so that the cost of components can be reused, should any one go out of business- ubiquity is the point. In other words, it should be IBM compatible like the ATX case. The condo could fit in like a 5-1/4” bay. Except multiple, storied ones, flanking a hallway for multi unit constructs.

How tall should these condo “towers” be? That depends on the city/town/village and the developers- the “unit” is independent of the frame, just as with ATX cases and the components that fit in their bays. The development of the buildings could be interdependent with the homes, in that container manufacturers could focus just on their specialty, like motherboard makers Gigabyte and ASRock, instead of concerning itself with the construction of the frames of the houses, which would be like steel/composite scaffolds.

In contrast to the way that vertically integrated hardware companies like Apple and HP develop all-in-ones (AIO) for entire PCs, modular container-like houses can be more like build-your-own PC case, where the value of the PC isn’t tied to just one component, and can be reusable even should one owner decide to move- and yes it’d need a cover if someone moves out- just like a drive bay:



With windows on the sides and front, of course

Comments, suggestions? Feel free to share your thoughts! Thanks for reading.

Comments



Write a comment...

