

At beginning of session, review these slides on screen:

Course title

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Learning objectives

# Basic Personal Shelter

Session FR313 at AIA Conference on Architecture 2018

Slide 1

Good Morning. Welcome to my program on Basic Personal Shelter - my term for very small, one-person houses. I'm going to share with you a journey that I have taken over many years. I am still on the journey. This opportunity to share it with you is a milestone for me. I would love to bring other people along with me to keep this journey going. I have tried to do this through my website - [VerySmallHouse.com](http://VerySmallHouse.com), aka BPS.house. I hope sharing this with you today will move this subject to more architects' awareness.

When I went through the list of programs being offered here to see what I wanted to attend, I was somewhat intimidated. There were titles on complex problems solved by complex projects, and big picture ideas to be discussed by panels of well-qualified persons. I hope you enjoy this program. On one level it is extremely simple. On another level it is highly complex. True, it is about a house

that looks like it came from the storage-shed yard at Lowes. It is 12 ft x 20 ft, the size of a one-car garage. But it represents my built effort to answer the question:

### WHAT IS HOUSING GOING TO EVOLVE INTO?

You might be saying “strange question”. Never thought about it. But we ask that question daily about cars, air travel, transportation in general, space exploration, medical treatments and technologies like growing new body parts, technical apparatus like televisions and phones, communications in general, and on and on..... But what is housing going to evolve into? I think it is a question we as Architects should be thinking about.

I suspect most people would say it’s going to stay as it is, except for modifications in styles and layouts. I don’t agree. This is 2018. The future is now. I went to school in the 1960s. 2018 is the future for me. Everything else is evolving, why not housing? We have evolved in our daily living to expect our personal space — that space we spend our home time in — to be clean and be able to support our life in a climate-controlled environment, which is dry and safe, and where we can eat, sleep, and bathe in privacy. We have this already in our country and in many places of the world. We live a very high existence that kings of centuries past could never have even dreamed of. Just as people cherish freedom once they experience it, so do people want to keep living in our level of housing once they experience it. The housing of less-developed countries is not a way most of us want to live.

So what do we, as architects, entrusted by society to manage the built environment, what do we propose that will allow the billions of people of the world to have the same quality housing we do?

Today, for this program, I'm going to recount some experiences I've had along the way as I've worked on small houses. We will continue to talk about the two big complex questions I've posed — (1) **WHAT IS HOUSING GOING TO EVOLVE INTO?**, and (2) **WHAT CAN WE PROPOSE THAT WILL HOUSE THE WORLD IN OUR HIGH STANDARD OF CLEANLINESS AND CONTROLLED ENVIRONMENT?** —and then I will open this up to give you a chance to speak. I will add at this point that I believe the answer to both questions lies in a modern personal housing module I call a Basic Personal Shelter.

Slide 2

I did not start out as an architecture student at Clemson in the 1960s asking these questions. I was just fascinated with small houses. I doodled them all the time. I'm not sure why. I was always kind of a loner as a kid. My dad was in the Army and we moved a lot. I would make a friend, and then we would move. Eventually, outside of my brother and sister and parents, I really had no close friends. I became very self-reliant and spent a lot of time on my own. Even today, I am single, never married, and my best friend is my cat. So maybe one-person houses is the right field for me.

I love residential architecture. I actually moved to Los Angeles in 1970 after graduation with the idea of becoming a residential architect. Southern California residential architecture, as done by Richard Neutra, and others, is my favorite.

Alas, I got side-tracked, and did not stay in LA and become a residential architect. I kind of regret that, but that is another story. I am sure we all have stories of being side-tracked in our lives. I did see Richard Neutra at an AIA meeting in LA when I worked there during the summers before graduation. I wish I were the person I am today. I would have spoken to him.

So we could say my work on small houses began when I drew a guest house for my parents around the time I was a freshman in college. There was no big picture question I was working on — just having fun. Most of you probably did the same thing. I will tell you now, though this jumps ahead in the story, that the real time it dawned on me that there is an enormous divide between what I call modern housing and other-world housing, was when I saw the book called *Material World* by Peter Menzel. This book shows photos all over the world of a typical family of a country in front of their house, with all their possessions next to them. It is a real eye-opener. Not to make you feel guilty, but to show you that life on another level, with far less of a dwelling and far fewer possessions is real for much of the world. They are not necessarily sad for it. I suspect it is what their culture knows. But it made me wonder how did they survive to old age with so little of the conveniences we have like hot and cold running water, toilets, electricity, heat and air-conditioning. Is it these modern conveniences that keep us alive? In some cases probably, but maybe more our sanitation and modern surgery and antibiotics. I did not feel sorry for their lack of possessions. I had already read Baba Ram Dass's book *Be Here Now*. It taught me the freedom of living in the moment without desire for possessions. But I did feel sorry for their lack of bodily-soothing running hot water, electricity for refrigeration to preserve food, and lights that extend the day. So ultimately, today, I see my one-person-house journey leading to the goal of designing a generic house that will give each person on earth a modern place to

eat, sleep, bathe, keep a few possessions, and visit with a friend. I have always called it a Basic Personal Shelter. I always figured it would have to be very small to be affordable, mass-produced, and shippable. Like the Volkswagen Beetle of the 1930s and 40s, I dream of a house that will allow everyone to have a home.

### Slide 3

I always sensed this could be accomplished best if each person had their own house. If you are part of a larger group, you still get your own house, which you can join with another, but you get your own private place, even if very small, where your own soul can flourish. I tell the story in my book — I will tell you more about the book later — of the lady I designed a nice family home for, around 3,000 sq ft, — mother, father, 3 kids — on a lake. She had a small deck off her bedroom that looked onto the lake. I went to visit her several years after it was built and she proudly showed me how she had enclosed the deck to have a room of her own. She was alone in the house all day when her husband was at work, and kids at school, but yet she longed for a place of her own. I thought of my house —  $5 \times 240 = 1200$  vs 3,000 they had, and each one could have had their own self-contained world with complete privacy. Of course I do understand they are a family, and wanted the interaction of sharing. And children cannot be on their own at the beginning of their lives. I know the BPS concept does not work for all needs, but I think it does have a place. I believe there is an inherent need for privacy, where we can grow as a person. Family is a bond and a bonus in life. Personal growth is a survival need.

Well, back to my journey. I left LA for Berkeley to attend grad school. Though accepted, I did not enroll, another derailment, but I did stay in Berkeley.

Those years I fondly remember as ones of personal growth. I call them my “graduate degree in life”. I got swept up by the intense inward-thinking movement fueled by Carlos Castaneda and the Don Juan books, Baba Ram Dass and Be Here Now, Alan Watts, and others, along with the music of the seventies, like Led Zeppelin and the Jefferson Airplane, that encouraged all this inward thinking and exploration. And it was a great place to be a person interested in architecture. Berkeley, San Francisco, Big Sur, Northern California in general were endlessly inspiring to me. I remember driving up the coast to see Sea Ranch by Charles Moore. It was like a journey to mecca. It was the epitome of beauty to me, the landscape and the architecture were one. It was incredibly beautiful..... I worked in some architects’ offices, but mostly I indulged myself in finding out about life and myself. I think I am better for it now, and I am grateful for those years.

I stayed in the Bay Area for 7 years, most of that time in San Francisco. There, after many living situations with roommates, I came to my noteworthy conclusion: I would rather live alone in a one-room house than in a palace with roommates..... And I did live in some magnificent houses during my time there. But the lack of privacy always left me wanting.

#### Slide 4

The architect in me kicked in. I started designing again. It was during this time that I started calling my small, one-person houses Basic Personal Shelter. I decided I would do something about finding an affordable place to live alone. Thus my first BPS. It was 12 ft x 12 ft. I called it a Hut House. I thought it would be simple to build and cool to look at. But where to put it? I was in San Francisco.

No vacant land that I could afford. So I put an ad in a neighborhood newspaper seeking someone with a flat-roofed garage who would let me put my 12 x 12 Hut House Basic Personal Shelter on their roof. This was to be my coming out party. I was finally about to design and built a house that met my visual and social aesthetic. I was excited.

(Pause and talk about the drawing.) The house on the right is the 12 x 12 Hut House. I started with the premise that you need 8 ft x 8 ft minimum to move freely in. Then add kitchen and bath. (Point out)

I actually got a response to my ad from someone who was willing to talk with me. Unfortunately, as fate would have it, another derailment. I had to return to South Carolina for family reasons, just as I was starting to make progress on my fantasy come true. The idea that seemed possible in San Francisco, now seemed totally foreign in South Carolina. I ended up staying in South Carolina. I became entrenched in a normal daily existence working in an office.

Slide 5

The idea, though, was still firmly in my head — a small, one-person house. I realized if I were going to make it a reality here, it would have to meet all codes without exception. Creativity in zoning and building codes was not running high in South Carolina in the late 70s and 80s. Thus started the effort, which I did complete, to build the smallest house the code would allow. At that time, the code required one room of 150 sq ft and a bathroom and a kitchen. My house is 12 x 20 to outside of framing, so approximately 219 sq ft - 150 sq ft = 69 sq ft left for bath, closet, kitchen, and walls..... It is not a tiny house..... The main room

and bathroom are typical size, and the kitchen is typical for a studio apartment. It does not feel like a doll house when you are in it. It is a small house because it only has one main room, not because the room is small. I have firmly convinced myself over the many years I have had this house that it is very livable.

(Pause and talk about the house with the following pictures showing.)

Show slides 6, 7, 8, 9, 10, 11, and 12 slowly.

It is not the smallest house I think is livable, but it was the smallest that I could build on a permanent foundation on a deeded lot legally. I do believe a smaller house is livable. I will talk about that more before I finish.

I had mentioned previously about my book. It is posted on my website. First the website. I started with VerySmallHouse.com as a place to post info about my house. I wanted a site name that was easy to remember so that I could start a movement. I was lucky to get that. Now I also have BasicPersonalShelter.com, VerySmall.house, and BPS.house. I have received a lot of emails, but I can't say it is a movement. Then I decided I needed to write a book.

Slide 13 (Hold up book. They have copies in the bookstore here or you can read it posted on my website.)

It is titled Basic Personal Shelter — A Housing Alternative — The Evolution of Housing in a Modern World. Instead of pursuing the evolution and perfection of style, I have chosen to pursue the evolution of housing itself. In a world where we swallow tiny cameras for digestive problems, and carry a phone that connects us

to everyone else, can we really believe that houses will eternally remain living room, dining room, kitchen, 3 bedrooms, 2 baths forever? Aren't people going to evolve socially in a way that they prefer a different home module? I remember the Jetsons on TV. I think they would embrace the Basic Personal Shelter. A very small, one-person house can be both future fantasy and present survival.

I see us as architects today with an opportunity to bring housing along with the technological revolution and to simultaneously solve basic shelter needs.

#### Slide 14

I currently work at the University of South Carolina. I am a project manager for building projects. It is a great job and a fun place to be. I love contact with the students and professors who like to think a lot, like me. I see students all day long all over campus walking with backpacks on their backs. These are intelligent young people, not yet corrupted or burdened by the stresses of the world. They willingly keep their life on their phone. I truly believe every one of them would gladly live in a Basic Personal Shelter if that were what followed as normal housing after graduation. In fact, I believe if they could push a button, or pull a cord, and their backpack would open up and envelope them inside their own basic personal shelter, they would sit right down where they are and spend the night..... Somewhere between that and my 12 x 20 house is the BPS I envision as the future of housing. For me, as an architect, I prefer to spend what time I have left on earth trying to push the evolution of housing into something as cool and life-changing as an i-phone. There are more stories and details I could tell you. You can find many of them in the book.

#### Slide 15

I would like to talk now about small houses in general. I believe that there will be a transition period from people living in the typical 2,000 sq ft home of today to the under 240 sq ft BPS I imagine in the future. I am hoping architects today will have opportunities more and more to design small houses for all types of living situations. Just recently I went to our city zoning office to inquire about building several of my houses on a lot zoned for multi-family. They immediately told me they don't allow tiny houses in the city. I told them these are not tiny houses, they are small houses, and meet all code requirements..... There are some relatively small houses in our city built many years ago for lower-income people that could be really desirable if the neighborhoods were better. I encourage architects with residential clients to expose them to the idea of living in a smaller house. It is no longer a lower-class stigma. The freedom, the economy, the simplicity, and the coolness of a small house can be very appealing. My work on BPSes is the end of the spectrum, but I think there is a lot of work to be done between here and there while society makes the transition. If we, as architects, treat small houses with respect, and not just as though they are the only thing your client can afford, then the client, the city officials, the lender, and the builder will all begin to join in and respect them too.

(Pause and talk about the slide showing the BPS compared to larger house.)

I will tell you that I see neighborhoods which have covenants requiring minimum-size houses of 2,500 sq ft. To me, the monotony of these neighborhoods is oppressive. A well-designed 800 sq ft house is just as legitimate as a well-designed 2,500 sq ft house. There are beautiful neighborhoods which have both houses side by side and are no worse off for it. It all has to do with how well you maintain your

house and grounds. And don't be so sure the people in the small house are less worthy than the people in the big house. These do not necessarily correlate.

One point I want to make to the residential architects who think designing a small house is easy and not worthy of their time, is this is not true. A small house can be very challenging. When every inch matters, you have to carefully think about everything. The floor plan is not forgiving. In a big house, it may be "a little tight". In a small house, "it just won't work". A successful small house can be just as satisfying to be part of as a successful larger house.

I hope I have not led you on too circular of a rat race in this talk. As I said at the beginning, I believe this is at the same time both extremely simple and very complex. It started for me at the simple level — design the smallest house. It has now become very complex for me. I see it today as the future evolution of housing, and also today's opportunity to house many people cheaply.

Slide 16

I leave you with a drawing of the BPS I want to build next. It is the 12 x 12 refined. I am not sure how I will build it in the city, because it probably won't meet code. Maybe I can pass it off as a kid's playhouse. Little do the city officials know that 100 years from now the city may be full of them. Of course by then they will likely be made of a metal from another planet and not look like this.

(Pause for them to look at slide)

A footnote: I found out yesterday that the code now allows houses with 1 room of 70 sq ft plus bath and kitchen. And if the kitchen is that room, then 70 sq ft plus bathroom. So I may be able to build this legally.

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Also, I want to say these houses look like houses because of the materials, but I believe when the Mass Personal Housing industry takes shape, they will look more like cars than houses.

I have followed this idea for a long time. I welcome contact with anyone else who is interested. You can reach me through any of my websites.

Slide 17

VerySmallHouse.com

BasicPersonalShelter.com

VerySmall.house

BPS.house.

They all go to the same site. It is an evolving title.

Thank you very much for coming today and listening to me.