

Domicology with Dr. Rex LaMore

Ologies Podcast

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Oh hey, it's that lady who uploaded two of the same episode last week with an explanation for you. So, there was a glitch or two in the intro of the Chronobiology Encore, so we took it down as soon as we realized it, fixed it, and reuploaded it. So, just delete the earlier version in your feed. I hope that clears it up, my bad. Okay, that being said, the Detroitology episode from a few weeks ago gave you so much context for some of the things we're going to talk about in this one, but this episode is a stellar standalone one as well because we have all seen abandoned buildings, and eerie photos, and empty places that look almost post-apocalyptic, and we've all wondered how a house or a place could go so unloved. Who owns it? What's the deal?

So, I've wanted to do this episode for years because abandoned houses are fascinating. But also, I stumbled across this ology, and I found the leader of this field is based in East Lansing, Michigan. He got his undergrad and his master's in resource development and a PhD in education and community development, and he's now the director of the Michigan State University's Center for Community Economic Development. He's also a member of faculty at the Urban and Regional Planning Program. He has 30 years of experience in distressed communities and properties; he studies and teaches about equitable development and sustainable revitalization. This is a cool dude, I loved him before I even met him.

I happened to be in Dearborn filming for *Innovation Nation* a few months back, and before my flight home I raced, safely, the 90 or so miles to his office in East Lansing to find he has the warmest and most welcoming presence. He's got an easy smile and long, silver hair tied back in a low pony, and he was bearing gifts in the form of educational pamphlets and recycled rubber coasters. And he led me to a conference room, we sat down to chat about everything from ruins to things he's found in vacant houses.

But before we get there, real quick, thank you to everyone who has kept the show going by supporting us at Patreon.com/Ologies for a buck or more a month. Thank you to everyone who tells friends, and rates, and subscribes, and reviews. I read all the reviews, such as this one left this week by AlinaTheBean who wrote:

Five out of five stars. Ologies makes them laugh, cry, and poke dirt. 10 stars if I could.

AlinaTheBean, thank you, as well as everyone who left reviews, I read them all.

Okay, onto the episode, Domicology comes from the Latin word for 'a colony of houses'. So wipe your feet, come on in, and sit a spell for echoey hotels, dusty furniture, broken windows, rebuilt starter homes, structural housing issues both literally and socially, how to make sure that your relatives don't fight over your shit when you die, avoiding perils in urban exploration, film trivia, disaster girls, pallet furniture, ambitious plans, angry whales, ghost towns, and why you might want to embrace a kitchen with certified domicologist, Dr. Rex LaMore.

Rex: Rex LaMore, he/him.

Alie: And Dr. LaMore too, right?

Rex: Yes, right.

Alie: This is the *Ologies* podcast so the more offbeat the ology, the more excited I get, of course. You coined the term domiciology, am I saying it right?

Rex: Yes, that's correct.

Alie: Yay! [laughs]

Rex: Think domicile.

Alie: Mm-hm, that's what I figured. When did it occur to you that this is a field of study that needs a name?

Rex: Oh, that's a good question. Part of the reason that the name came was because it gives focus to the area of study, and this is a very complex field, as you can imagine. So, for several years we were looking at the challenges of distressed areas in our state, both urban and rural, and one of those is the structural abandonment that has plagued the Great Lakes states, certainly states like Michigan and some of our core cities, but also some of our isolated rural areas have a significant amount of structural abandonment.

And as we began to look at the work and I was serving on my local planning commission, one of the proposals that had come to our local planning commission was a cell tower to be constructed in our community. And at the time that this proposal was brought forward, it was brought to our attention on the commission that the local government had the option of placing a bond on the cell tower so that at the end of its useful life, there would be a financial resource to remove that cell tower, so it doesn't collapse, obviously being a potential health and safety hazard to anybody in the area. And as I sat there, I thought, why don't we do this for all structures? What is it that makes a cell tower so unique? And then we began to investigate, do we have other examples of where we find ways to financially remove structures at the end of their useful life, and we do. When the electric generating wind turbines communities can put bonds on those, oil rigs, also oil pipelines.

And so, it occurred that maybe we ought to think differently about the way we build structures and, given the complexity of this topic, it's important to have a name for it so that you can gather colleagues around from a number of different disciplines, and this definitely calls for a multidisciplinary approach. And I thought, "Well, what word would capture the concept of residential abandonment?" And so 'domicile,' being a Greek root word, and ology, which is a science that you're very familiar with.

Alie: Yes, indeed.

Rex: Came together and the term 'domicology' and that's really where it came from.

Alie: Are you seeing more and more people adopt that term?

Rex: Yes. Not as quickly as I would like to see it. More importantly though is to draw attention to the concept of domiciology, which is that structures have a life cycle and that we should plan, design, use, reuse, and at the end of their life, salvage the materials to maximize the reuse of the materials, and minimize the amount of the materials that enter landfills, and also find other ways to minimize the negative social, environmental, and economic impacts of structural abandonment on communities. The term is useful in that regard, but I'm more excited about seeing the movement across the nation, across the globe, in terms of recognizing that our built environment is a substantial resource investment.

Aside: So, if you're housed, look around you. Think of all the wood, all the stone, the cement, the wiring, the gypsum drywall, the plastic sheets under the flooring, the ceramic, all the things that have been gathered and brought, and mined, and shaped, and shipped, and constructed to keep

you safe from bears and/or other people, and also the elements. So, if you're housed, you're surrounded by just a wealth of stuff.

Rex: Much of which, I should say, ends up in landfills after a period of time and that's a resource, a linear model that we can't sustain, and we need to think differently about that built environment. So, I'm excited about the practice of domicology. I'm hopeful the term catches on, but I'm more interested in that we adopt the policies, and practices, and models, and tools that end this unsustainable linear paradigm that we have now about "build it, use it, throw it away."

Alie: Yeah. Well, I've wondered this too and I've wondered, when does a building become abandoned? How long does it have to sit there and who owns abandoned buildings?

Rex: Very good question and very complicated answer. First, let's talk about the types of structures that are there. We have residential, industrial, commercial structures. Those are the above-ground structures that all of us see, but then we have the below-ground infrastructure as well.

So, on the residential, commercial, and industrial properties, they are owned, in many cases, mostly by private landowners. And at some point in their life cycle they go out of use. And it depends on the kind of structure, residential structures, for any number of social economic reasons, the community goes into economic decline. Industrial disinvestment is certainly one of the indicators in the Greater Midwest for abandonment. We see a lot of residents whose primary employment has left the region, and they've been left unemployed, and they move out of the region, their structures are left behind.

Aside: Sometimes those homes are owned by banks, sometimes there's an owner that has left it vacant, and other times, a city owns a home because of tax foreclosure. But if you listened to the recent Detroitology episode, you now understand the pairing of these two disciplines and why I had Detroit go first. And listen to that one to learn about 3,000 square foot homes for sale for a few thousand dollars. Now, in the case of Detroit, many empty homes are owned by the Detroit Land Bank Authority under the planning and the development department. But of course, anyone who follows Instagram and TikTok accounts of people exploring abandoned malls knows that...

Rex: We've also seen the abandonment of those industrial structures. And then we have other consequences like the Amazon Effect, where people are shopping more and more online and so commercial structures go out of use as well. [*"It is the symbol of Amazon supremacy."*] Now, the process of going from privately owned to abandoned is a legal process because in the United States we give great importance to the right of private property owners. We don't take their properties without due process in the courts, and in some places, that takes a considerable amount of time. And so, you see properties sit vacant in some cases for an extended period of time, and those could be for any number of reasons. There may be some challenge related to who actually owns the title to the property, if it's a residential property. If it's an industrial property, there may be contamination on it, similarly for commercial property. So, that title issue is a time eater and so a property will remain abandoned.

Many communities, many states, have adopted policies where they have what are called quick take laws where a property goes, say for example, into tax reversion for several years, the local government can take the property from the property owner after due process. When that happens, now the property is owned by the public and then they can take action to remove the property in some way *if* they have the resources. And what tends to happen, and this is part of the plague of abandonment that confronts many of our communities, is this tends to happen in many of the poorest places in our communities where we've seen substantial disinvestment. Now, in addition

to the loss of residence, the loss of tax revenues, the loss of jobs, these communities are also now plagued with abandonment of residential, industrial, and commercial properties.

And then if you add the complication of contamination, [*Oh dear.*] the expense is incredible. Now, sometimes in industrial properties in particular, it's not so much the removal of the structure, there are in fact companies in the United States, for example Bierlein Industries up in the Tri-Cities in Michigan, has made a living out of removing abandoned General Motors plants. They make their living by selling the steel from those plants. And so, they bid on the actual properties. So, the structure actually gets removed but then you often end up with a contaminated site that requires further investment to clean up the site so it can actually be repurposed.

Aside: And for more on that, see the recent Environmental Toxicology episode with Dr. Kim Garrett we just did a few weeks ago about the Ohio rail accident and contamination, and just in general, poisons in the environment. And Rex says that those abandoned factory sites are valuable land because as former factories, they're connected to transportation infrastructure, so they're typically near freeways and train lines. But they might be lousy with environmental toxins if they're not cleaned up properly. So, no matter how much the neighborhood needs it, you can't just plop a boba-shop-roller-disco on top of an abandoned lead smelting plant and call it a day... No.

Alie: How much of your work involves traipsing through abandoned buildings? Because I feel like there are so many of us who follow things like @ItsAbandoned on Instagram, I don't know if you've seen any blogs. Or, you know, Aaron Foley, the storyteller of Detroit, I interviewed him about Detroit recently for this episode and he called it ruin porn.

Rex: Yes.

Alie: Which I'd never heard that term before, this voyeuristic look at the decay. And, you know, how much of your work involves having to visit those sites and why do you think we want to go in them even though we don't belong there?

Rex: The ruin porn scenario is an interesting one. In fact, I applaud the ruin porn folks for drawing our attention to abandoned structures. I think, in many ways, we drive by them and we don't think about them; it's a reflection of the neglect they're experiencing, we don't even see them. And we don't give a whole lot... I'm talking in general, the general public, doesn't give a whole lot of thought to "Why is that structure abandoned? How did it get abandoned? What can we do about it?" It's clearly an eye sore, it's a detriment to the surrounding property owners, it's a health and safety hazard to the community. So, I give credit to the abandoned porn folks for drawing our attention to these structures. [*However...*]

I wouldn't want to romanticize it, though. I think that's a dangerous path in that it really doesn't take into account the seriousness of the consequences that abandonment has on adjoining properties, the overall community. And I don't think their intention is to do that, to minimize that negative effect. I worry about us being calloused to abandonment. I think in general we're calloused to abandonment, and we need to turn that ship around so that we say no, we shouldn't be abandoning structures, and we should find solutions to it so that we end this plague of abandonment.

Alie: And how does a building go from vacant to abandoned? You know, at what point does it have to sit empty and then does that tend to spread in a neighborhood?

Rex: Yes. There are many forces that cause abandonment and in fact, I'll give you this and you can take a look at it.

Alie: Yes! Love to have a handout.

Aside: Oh, I love a handout. I love it. Rex slid a packet across the table titled [*drumroll*] “Domicology: A Comprehensive Approach to Structural Abandonment.” And in it was a table listing factors contributing to blight and abandonment, which listed social things like racial segregation, and job losses, and the Amazon Effect, he calls it. There’s also a flow chart showing that an abandoned property becomes blighted and unsightly, which can kick off a cycle of community decline, and then the burden of demolition and cleaning all that shit up falls on the government, i.e., the taxpayers. So, no one is really happy.

Rex: Some of these causes are fairly straightforward like de-investment, that has certainly resulted in substantial job losses here in the Greater Great Lakes region and people can’t afford the places they’re living. Sometimes it’s a family member who has passed away, nobody’s here in the region who would be interested in keeping the property, they just walk away from the property. [*femme voice, “Byeeeee.”*] Again, it might be a company that has gone out of business, they want no further interest in the property, so they walk away from it. [*deeper, masc voice, “Byeeeee.”*]

What do we do with the abandonment that we currently have? And then another challenge is, what do we do to prevent it in the future? And what methods, tools, models, and policies can we adopt that will minimize that abandonment in the future? Structures have a life cycle, and we should plan, design, construct, use, reuse, salvage, deconstruct in such a way that we maximize the positive and minimize the negative of those structures’ life cycles.

Alie: Does it change at all how you plan for estate planning and things like that? Are you like, “Everyone should have a will, put their stuff in a trust, don’t let it go to probate, don’t let it get abandoned.”? Are there things that we kind of don’t do that would prevent some of this too?

Rex: Yes, and certainly those would be methods that might result in property having a clear title. And again, that’s one of the challenges after a certain occupant might pass away or leave, there’s uncertainty in who owns the title and has responsibility.

Aside: Rex says that sometimes a person inherits a house and has no interest in dealing with it, and over a period of time, it will just revert back to the public sector through the process of title transfer. But if you own anything, get a will and trust. But what’s the damn difference between a will and trust?

Okay, I looked this up for us. So, a will is cheaper to get done legally, but it doesn’t mean anything unless you’re dead, and once you’re dead, things can still go into probate. And if you’re incapacitated but alive, folks have nothing to go on here. And probate means that you’re grieving loved ones have to spend years doing very annoying paperwork and spending a bunch of money in court. So, what you want is a trust, which also protects you if you’re incapacitated but alive, and a revocable living trust lets you change the terms while you’re alive. And listen, I’m not here to bum you out okay, but just, if you can, find an estate planning attorney, or use LegalZoom, who have not paid me for this mention, or just google stuff. Get ‘er done. Because of this episode, I now have an appointment to make a trust next week. Please clap.

Alie: Are you familiar with the website or blog, Cheap Old Houses?

Rex: No.

Alie: It’s a blog of, you know, “Here’s a house in Indiana that’s being sold for \$89,000 and it’s a Victorian five-bedroom that needs some work,” but you know, they highlight these different houses that are pretty inexpensive. But is there any part of this study that has to find out when something is worth restoring versus when it’s better to deconstruct and salvage the material?

Rex: The field of domicology is an emerging field of scholarship. I think the question you just asked is an excellent example of “it depends.” *[both laugh]* We don’t know for sure, but it certainly would depend, in part... as I think about responding to that question, the individual who might be looking at it and the skillsets that they have. Are they a handy person who can manage some complicated task? Are they not? Do they have the resources to finance a renovation job like that?

There is some work going on in the field of domicology where communities will do an assessment of a property prior to any demolition or even renovation, because renovation also contributes to the material waste stream. So, it’s not just abandonment that contributes to that waste stream but also renovation. There are folks who will come into your property, assess the value of the materials that may be salvaged, and then give you that estimate, and then that might help the property owner make the decision, do I want to invest in a renovation, do I want to deconstruct, or do I just want to demolish this thing and throw it in a hole in the ground?

Alie: Which makes me so sad, and I hate thinking of that. And I’m sure you do too, just thinking also of how much old-growth timber was cut during westward expansion and that’s irreplaceable now. How difficult is it to salvage those materials? Do you have to get special permits? I’m sure it’s cheaper, some people think, just to knock it down and start over.

Rex: In the current market environment, in most situations, it is currently cheaper to demolish and throw it in the landfill, and there are a lot of variables in play there including what you charge for your tipping fees at landfills. We’re a very, wasteful society in general so we, in general, have relatively low tipping fees.

Aside: By the way, a tipping fee is what you pay the dump to dump things. In the US it varies from \$37 per ton to about 70 bucks per ton. But in places with less land and more shame about it, it’s more expensive to bury your garbage. Like in Sweden, only 1% of their waste goes into landfills but that’s because they burn a bunch and use it for energy. Sweden and Austria both charge about 150 Euros a ton to trash your stuff.

And I should also say that my sisters and I have been helping my folks move the last few years. And a few summers ago, we did a dump run for my dad who was cleaning out his moldy old shed and the closest landfill to them was located at 4100 Throwita Way. Throw-it-a way. Can you even? I appreciate it so much.

For more about garbage of course, you can see the recent Discard Anthropology episode with Dr. Robin Nagle. And for more on building, we’ve got a Xylology episode with Angel City Lumber founder Jeff Perry, who taught us all about the beauty of lumber and of slow-growing trees.

Rex: So, how difficult is it to capture the old-growth wood and thank you for pointing that out. Most of the structures in the Greater Midwest do have an old growth component to them, obviously. And when we say old growth, we’re talking about the primal forest that was here, that was harvested when the lands were settled. In Michigan, much of the wood is in Chicago. After the fire, they came and chopped down a lot of Michigan and moved it to Chicago, and a lot of that wood from the fire went into the lake and a lot of that lakefront drive is all built on debris.

Alie: *[gasps]* I had no idea!

Rex: So, capturing that old growth wood, which is a very different wood– it’s grown over a longer period of time it’s a much more dense wood, has different capacity, some of our colleagues in forestry have been studying this wood so that we can ask questions about what might be the possible value in reusing that material. And so, that’s one of the big research questions out there. And in most of the Midwest, where we’ve built mostly with wood, what do we do with the high volume-low value materials?

Aside: Like, for example, utility grade lumber, which is also called shitty lumber by some people, probably.

Rex: And which right now, it's economically more feasible just to throw it in a hole in the ground if you don't include certain environmental variables. But it's expensive to take it apart, and pull the nails out, and collect the wood. And then the question is, what do you do with the material that you salvaged? Now you've got a stack of old growth wood, and if there's not a market or a resale market for that then that stack just sits there and doesn't get reused, so there needs to be a market for the resell of that wood.

Now, oak floors, and all the mantels, and the pretty pieces that we see in many of our older structures, those generally will get picked up and reused in a resale market because they are extremely rare and valuable, and you can't really, in many cases, buy it in the open market, you have to find it in the resale market. But in other cases, there's no incentive to use wood that maybe has been in a structure for a hundred years, the average lifespan of a residential structure is approximately 90 years. [*"So young."*] And so, it may have some knots in it, it may have some nail holes in it, it gets expensive to bring it back to a pristine use. So, are there other ways that we can use it?

Some of the work that my colleagues are doing, in forestry again, is looking at the possibility of using it in cross-laminated timber, where you would create beams from salvaged wood, stack it and glue it in a way, and then you can surround it with virgin wood, so you get a beautiful beam and then use that in wood construction. That's certainly a valued use. And now, if we can find a market for that and have a retail sector that encourages that resale, now the material has value and we're not going to throw it away. And that's part of the challenge in domicology is trying to find value for these high volume-low value materials.

What tends to happen in a lot of structures, particularly residential, is in many communities, as soon as the lights go out and the boards go up on the windows, the scrappers are in grabbing the metals because there's value in that and they're getting the value.

Aside: So, quick aside. While looking up residential and commercial listings of abandoned properties, I came across this one structure that was listed for \$350,000 and how many square feet, you're asking? A quarter of a million square feet. A quarter of a million square feet, like 17 stories high or something, and it is the formerly glorious Lee Plaza hotel in Detroit. It's now this brick monument, it's in ruins, windows have been stripped and their dusty ballrooms left empty except for tattered chairs and a collapsed grand piano.

Augh, in the Detroitology episode, Aaron Foley talked about ruin porn, these haunting and gorgeous photos of abandoned properties, and I have to confess that in researching this episode I gawked at the site Abandoned America and the description that Matthew Christopher wrote of that Lee Plaza hotel I just described was pretty chilling. Matthew wrote:

There really wasn't much left of the Lee Plaza Hotel in Detroit by the time I got there to photograph it in 2009. Floor after floor revealed an unprecedented level of vandalism and theft that had reduced the interior of what was once an architectural masterpiece to near anonymity. Walls had been bashed open to gut the copper wiring and pipes... The green copper roof had been peeled, presumably in broad daylight, and sold for scrap... Even the support columns had been stripped to little more than concrete and rebar.

And yes, if you were to saunter over to the Wikipedia entry for 'metal theft' you'd find that when the economy is down and people need money, or when scrap prices are particularly high, abandoned properties are at the highest risk of being stripped for metal like copper and steel. And

in one city in India, over 10,000 manhole or maintenance hole covers were stolen in a period of two months. And then in 2011, in Pennsylvania, two brothers quietly dismantled and stole a 40-foot steel bridge. [*"I have a bridge to sell you." "Why?"*]

But what about the stuff that no one wants to steal? And maybe they just want to pee on or leave alone? Well, Rex says that some governments are trying to sweeten the deal if you can keep things out of dumpsters.

Rex: So, instead of getting the normal demolition fee, you would be given a reduced fee if you've been able to divert a certain amount of that structural material away from the landfill. So, it's an incentive for diverting the material that might go into the landfill.

Alie: Yeah, and you mentioned a 90-year lifespan for most residential buildings. Does that really depend on how fast a certain suburban sprawl went up or what style of house? I feel like ranch houses in California can't last as long as these Victorian houses out East, brick. Where does that number come from?

Rex: It's a national average and it's based on the ages of structures that are demolished. You're right, it varies across regions, and it certainly varies on the quality of the structure. A lot of structures don't last that long, and again, this is some of the research questions that we have out there. Here's another set of research interests: modularity. [*AI voice, "Modularity."*] The idea that modularity offers an opportunity to build more affordable housing, which is certainly a challenge for much of the United States, creating more affordable units.

The question is, does modular construction allow for easier deconstruction and more material salvage, and more material reuse? Can we, in a modular process, deconstruct a structure at some future date, and then salvage that material, and then recycle that within the next modular structure that's being built? That's some of the research questions that we're anxious to try to find answers to and encourage some of your listeners who, maybe in ways that they could actually do that, help contribute to that knowledge base so that we can begin to think more thoughtfully about that. Is modularity another way to support material salvage and reuse and expand our domicological footprint?

Alie: And modularity, does that refer to manufactured housing that can be easily put together on site but manufactured elsewhere?

Rex: Yes, exactly. That's what modularity refers to.

Aside: And remember when I mentioned those tipping fees? Well, Rex says that some countries have a more advanced philosophy about their resources and trash and that's called 'extended producer responsibility', which is fancy words for, "if you make it, you have a responsibility for the life of the item." And domicology applies that to structures, which is why we're all here.

Rex: It's not the take, make, waste model anymore; it's the take, make, reuse, reuse, retake, and you know, creating that more circular model that reduces the amount of materials that are wasted.

Alie: Do you ever feel that what you do is maybe a little bit ahead of its time? Or rather, even harkens back to a pre, kind of, massively industrial capitalist time? It's revisiting that but it's also futuristic. Do you ever socially come up against resistance to this? That it's almost a little bit anti-consumerist in principle? Do you ever find resistance to that from big companies or from economists that just say "No, keep buying, keep making"?

Rex: Yes. [*Alie laughs*] There's no if, and, or buts around that question, the answer is yes but it's not often said so clearly. It's usually veiled. "The economics and the marketplace don't support it, it's too expensive." But then the challenge that some economists will come back with is to note that

what you're doing is shifting the cost from current generations to future generations, both in the cost of materials extracted and in the cost of materials wasted. And that if you took into the true cost accounting and we certainly see this in our carbon accounting, if you took in the true cost, you would find this actually is probably not that much more expensive. But there is resistance.

I have on my office wall a little note that reminded me, during World War II, when we were fighting fascism directly, there was an effort, use it up, wear it out, make it do, or do without. And that was the motto that many of us adhered to, our parents and grandparents, that allowed us to maximize our resources and win that war against fascism. So, I think there are many... and I find much hope in our younger students who also seem to understand this. We live on a finite planet, we have a finite set of resources to meet not only our needs, but future generations' needs, and we have an obligation to make sure that future generations have choices and not wastefully deplete nonrenewable resources.

Alie: That's a great answer. It is! And you know, when I think about...

Rex: I'm a product of my environment. [*Alie laughs*] But your question about future, this is definitely future-oriented, and we need to think about the future in the work that we do, in community and economic development here, it is about the future. What is the future world that we're trying to create? So, we give thoughtful consideration to what that world might look like. And so, resource utilization is one of the elements of that future world.

Aside: So, the structures we build can't just function for today, they have to have value and practicality for decades to come, and this means changing the way that we're building. And in the US, the leadership in energy and environmental design, or LEED Certification Program began in 1993. So, some green buildings are millennials. But what is the Gen Z or Gen Alpha or even the Gen Beta of buildings? Ding dang holograms? Will we even live in structures? I don't know.

Alie: What about buildings that are, say, LEED certified, and they're eco-friendly, and they're modern; we see a lot more glass and metal. Older buildings, I feel like we see a lot of masonry, we see a lot of timber. What has more potential in terms of reusing those resources and what has longer lifespans?

Rex: Well, LEED buildings do give some credits for material salvage and reuse. Now, some of the research that some of our domicologists have done have suggested it could be more credits but that's just because they believe in this.

Steel is a highly recycled material. As I mentioned before, there are companies that have actually made a living out of tearing down old steel structures, salvaging the steel, and reusing it. Steel, the automobile for example is 90% recycled by weight, right? So, steel is a very highly recycled material. In fact, there's some projections in the future, not too far off, that we won't even need to mine any more steel. That just by reusing the steel that was already mined and being thoughtful in collecting it and repurposing it, we can do that. Aluminum is another metal. Metals we're good at. We're good at metals because we see the value and there's relatively high return on investment in recycling and repurposing.

Where things get a little trickier, wood is a little trickier. Cement, not too bad. Cement is good. It's a high-volume, high-weight material so there's a lot of effort in moving it around but it generally gets ground up and reused in other ways, it can be repurposed as future cement or it can be used in other fill for structures. Things like asphalt shingles tend to get a little tricky, partly because of the material in the shingles themselves, they don't lend themselves to road resurfacing, which was one concept that was used. They tend not to last long in resurfacing of roads, but they can be used as

possible underlayment within a road structure, making sure it doesn't leech into the water, so there's other possible reuses.

Aside: So, I looked this up, and apparently in the US, 12 million tons of asphalt shingles end up rotting in landfills and one company called GAF, and I hope I didn't make a gaff by mispronouncing that, GAF, just introduced in the last year a version of shingle that contains 15% recycled materials, which is something that you can raise the roof about. [*cheesy laugh*]

Also with concrete, I have horrible news, but it's terrible for the environment. But if you can intercept concrete before it's even ground down, you can get an absolute assload of it for free to build with. Like, when people tear up patios, and floors, and driveways, it's chipped into these irregular but slabby flat chunks and people *beg* you to haul it away. Look up demo concrete, or my favorite, the term 'urbanite,' which is what this type of stone has been rebranded as, which is genius. There are so many videos and tutorials on using urbanite as pavers, or on stacking it to build landscaping walls, and all kinds of stuff. And once you know what it looks like, it's kind of exciting to spot repurposed urbanite out in the wild. *Wood* you use it to build? That was a pretty garbage pun, which is serving as a segue. Desperate.

Rex: Contaminated woods are tricky; this is going to be a challenge for us. The lead paint on exterior structures is an issue for us and we're going to have to find ways... I mean, you can sandblast it off then you've got lead sand remnants, but you've got clean wood, you can use it, takes time and money. So, it's possible.

Plastics, we have challenges with. All types of plastics, the PVC that's in structures is also a challenge in terms of, can it be shredded? Can it be reused? Yes, some of it can; no, some of it doesn't remelt very well and can't be reprocessed. Final siding tends to be a little bit challenging because it's a plastic derivative. But different materials lend themselves more easily to re-salvage and reuse.

Alie: What about gypsum in drywall?

Rex: Yes, good question. Yes, gypsum can be reused, but most of the drywall that we have has that paper covering on it, and separating the gypsum from that paper is an expensive process. And this is some of the more interesting research that's gone on is biodegradable adhesives that you could use to separate those materials and salvage the usable part, like the gypsum, from the paper and then reuse that. So, there's a whole set of challenges, and this all really falls under the circularity concept.

Aside: What is the circularity concept? Rex breaks it down.

Rex: If we make it, we have a responsibility for its end of life, and so we think about how that might be repurposed, reused. Most glass can get repurposed and recycled, so there are good things and there are challenges. There's a lot of... The 21st century has a lot of challenges.

Alie: [*laughs*] Do you have any tips for people who are looking to buy salvaged materials, like where to find them? Yeah, like a good price or reputable place?

Rex: Depends on where you're at. If you're here in Michigan, Architectural Salvage in Southeast Michigan is a good place to go, they've got a fairly good warehouse full of materials.

Aside: If you're not near the wonderful Architectural Salvage Warehouse of Detroit, you can google 'architectural salvage' and your location and you might be surprised to find cool resources that can make building or remodeling cheaper or more sustainable, and less of a carbon copy of whatever is trending right now on social media in design. So, check out Habitat for Humanity's ReStore locations, they sell everything from sconces to the actual kitchen sink.

And if this episode is just speaking to you and maybe you need to shake up your life a little more, apparently, Habitat for Humanity's building folks and ReStore locations are always looking for volunteers. Also, for more on how volunteering happened to change my life just a couple hours a week, you can see the Field Trip: Natural History Museum episode, which I'll link in the show notes. But yes, salvage places, it's so exciting.

Rex: We don't have enough of those retail facilities, that's part of the problem. And transporting this material is expensive because it's heavy. So, we actually need a dispersed system of trained deconstruction crews who then take it to retail facilities like your reused Home Depot, and there, people can find what they're looking for. Now, a lot of the challenges are, can you get the amount of material in the volume that you need? I would encourage you to ask questions about, if they know, where did this come from? So that you have some sense, would it have likely been exposed to any contaminants that you would be concerned about. I think you would want to be careful about getting into anything that might have any lead in it or something like that. So, ask questions of the retailer, if they know where it came from.

Alie: Yeah. This is completely just purely for me; I recently made a table in my backyard out of pressure-treated wood. Is that a bad idea? Does it have arsenic in it?

Rex: Well, that is something they've used in the past in pressure-treated wood.

Alie: But if it's fairly new pressure-treated wood that was left over from a deck, say...

Rex: I wouldn't eat food off of it.

Alie: Good to know! Good to know!

Rex: Yeah, put a tablecloth down or something.

Alie: Okay, good to know.

Aside: And just a heads up, pressure-treated lumber usually means that chemical preservatives are jammed into the wood at high pressure. And depending on your country's regulations and the age of the wood, it can have all kinds of stuff in it to keep away rot, and rats, and pests. So, do your homework before licking it, or rolling around on it, or eating off of it, et cetera.

Now, what about constructing your whole living room set out of broken-down pallets? It's thrifty, it's resourceful, it might be dangerous. So, look for stamps on the wood and definitely avoid stuff that is stamped with an MB, that stands for methyl bromide which is a pesticide and it's also toxic. HT means that the pallets were heat-treated and those are generally safe, but once again, do your research, be cautious. It is amazing to save some money but not at the price of your actual health.

Alie: And I wanted to ask a little bit about abandonment versus gentrification, if they are similar but opposite forces? And this just... it's boggling to me because I live in LA where you cannot buy a one-bedroom condo for under a half a million dollars, and then there are other places where homes are abandoned, vacant, \$10,000, \$50,000. And with the pandemic, we saw so many people who were able to telecommute. Are you seeing any movement into these areas that have been economically depressed or left? Why are some homes left unused and then there are so many people who need homes? What's going on with that??

Rex: *[laughs]* It's the mismatch of the economic system between where the jobs might be and where the opportunities might be, and where the homeowner, the future homeowner is, and where the actual facility might be. I think there is some hope in the Greater Midwest that we may be an attractor in the future for folks who have the opportunity to live anywhere in the world and can't afford a place in, like, a high expensive California scenario, and move to another place like in the Greater Midwest

where there are vacant properties and available structures. With a certain amount of investment, you would have a fine structure.

Now, there are other forces at work here, if you have children and the school systems aren't functioning very well, you may be concerned about moving there. You may not make the choice just solely on the value of the house that you may be purchasing, you may be thinking about other issues, amenities in the communities.

Aside: Oh right, kids. I can't have kids and that's probably for the better because it seems like so much responsibility. But if your family makes fun of you for being kid-less, just know that your Podmom Jarrett has classified us as "dual artists, no kids" and calls us DANKs. Your kids seem cool and we're happy to be their weird lady uncles.

Rex: And there are efforts in those distressed areas to say, "Let's make ourselves attractive, let's make our schools successful, and they will come." I think there's some sentiment that that's likely to happen over the next 10 to 20 years.

Alie: Do you see any types of, you know, structural racism, or sexism, or anything like that that prohibit those areas that could use the resources from getting it? Things like investment in the community, upgrading public works, and transportation and things like that?

Rex: Well, clearly racism exists, and disinvestment has occurred, and it has fallen unduly on those poor and minority communities. That's a clear case in the Greater Midwest, and I can speak with some confidence about that phenomenon and find very few people who would disagree with that. Will that continue in the future? Let's hope not. Racism still exists, certain people will choose not to live in multiracial, multicultural environments, but others *will* choose to live there. So, I'm hopeful that that is changing.

And I think again, the other factors at work, crime is another deterrent for investing in a distressed area. Because some of what's happened as there's been abandonment in these communities, their costs of operation have continued to be high. Roads have to be maintained, sewers have to be maintained because they're a grid structure, even though some places have cut off parts of neighborhoods because there's nobody living there, and we can't afford to keep the water running; not very common but it's happened.

So, you've got poor places with disinvestment in infrastructure and now it's time for them to try to revitalize, they may not have access to the revenues. There is some recent evidence from the federal government that they're starting to pay attention to these kinds of concerns, I'm hopeful. And racial discrimination in lending is against the law and people need to pursue that to make sure the private lenders are fulfilling their legal obligations. If they want federal insurance, they need to follow the law. And so, hopefully we can overcome these barriers which do exist and are impediments to the revitalization of some communities.

Alie: Yeah. Is that Title IX?

Rex: Title IX is the sex and gender...

Aside: Just a side note, in the US, Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin in programs or activities that receive Federal funds. And eight years later, Title IX went into effect, and that reads:

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.

Again, that was in 1972 that they finally made that edict, the same year *The Godfather* was released. My sister was already born and alive on planet Earth!

Alie: And it's boggling too just to think that a generation ago, it was illegal for some people to buy homes in certain districts, it was illegal for some people to have... I mean, we're still living in a time when I was alive and on the Earth when a woman couldn't get a credit card. So, there's so much structural sexism and racism and things that are still at play with buildings that aren't that old. Can I ask you some listener questions?

Rex: Oh, yeah sure! Hopefully, I hope I have a response.

Alie: I know you're going to have great ones, I know you're going to have great ones.

Rex: I want to know if they're my certified domicology students.

Alie: *[laughs]* Yes, we'll see.

Rex: We've been teaching a course for the last four years, taking students through a 15-week discussion about structural abandonment, both the social economic, environmental, and then some of the solutions to it. So, we have a group of what we call Certified Domicologists out there who've applied themselves over a period of time to try to understand this complex phenomenon. And on our webpage, we have a series of student papers, in our student domicology papers, six volumes of student papers that, if your readers are interested, they can check that out on our webpage.

Alie: I mean, I feel like anyone who has ever spent time looking at abandoned buildings online, those are your favorite Instagram and TikTok accounts, get up in this ology. This is all about you.

Aside: And if I may brag, after this interview, Rex emailed me a certificate bestowing the title of Honorary Domicologist *[DJ airhorn]* and it is something that I shall cherish forever.

But now we are about to get to your questions but first, let's sow some financial seeds toward a worthy cause. And this week, Dr. Rex LaMore chose the Peace Education Center, which promotes nonviolent solutions to world, national, and local conflicts. And you can find out more about them at PeaceEdCenter.org. Thank you, Rex for choosing them and to sponsors for making that donation possible in his name.

[Ad Break]

Okay, on the home stretch with your questions. Patrons, you can submit questions in advance of recordings at [Patreon.com/Ologies](https://patreon.com/Ologies), costs as little as a dollar a month to join. Okay, let's go.

Alie: A bunch of people Elisabeth Westner, first-time question-asker Kelsey Fant, Pascal Perron, Tracy DeGarmo, Jasmine Liu wanted to know about going into abandoned buildings. Kelsey asked: How do you feel about YouTubers who urban explore? And a lot of people wanted to know, is it safe or legal to explore abandoned buildings?

Rex: Not without permission, that's trespassing. *["This is illegal."]* Now, are you likely to get prosecuted? Maybe. Depends on the building, depends on the location. Residents keep an eye on these properties because they tend to harbor bad things, and so neighbors try to keep an eye on abandoned properties. Now, if you're going into a larger abandoned school, it would be dangerous, it would be dangerous. I wouldn't do it without permission.

Aside: Okay, I just learned that creeping on vacant places is called urbexing, for urban exploring, and it sounds brave and badass but not without horrifying perils such as inhaling mold or cancer-causing asbestos, ceilings caving in on you and crushing you like a panini, floors can collapse, people can sneak up on you, you can step on stabby glass, or rusty nails, or metal, electrical shocks

or fire can happen from exposed wires. There are rats, snakes, possibly rabid animals, poops of all varieties, maybe ghosts.

Alie: Jessica Kleist, Ali Vessels, Jamie Quinn, Julia Vollmer had just a really practical factual question, just wanted to know: Are they abandoned because they're haunted? Is that the reason? Did ghosts chase people out of the buildings? [*Rex laughs softly*]

Rex: We've not discovered that phenomenon yet. [*Alie laughs*] But the research is not over. I will say, having visited abandoned sites, homes, there is an eeriness to what is left behind. You'd be stunned, or at least I was stunned and we've taken our students to sites, we have partners here in town that allow us to visit abandoned residential properties, the kinds of things that are left behind, you can just imagine the families that had lived there and the lives they had led, and the fact that they're now gone and they've left these things behind. I mean, children's toys, mementos from visits, places they may have visited. To some extent, there's a heartbreaking element to this, in those cases. When you're entering an abandoned property that hasn't already been gutted or cleared out it's... There is a sentiment of "people used to live here."

In fact, one of the stories that I tell my students, years ago when we were visiting a demolition site, there was active demolition going on and we were visiting the site just to see what goes on in a demolition, one of the neighbors came out because we had a group of students standing around. She said, "What's going on? Why are you all here?" And we said, "Well we're here trying to study abandonment and domicology," and I said, "I bet you're glad this structure is finally getting taken down." And she said, "No. Actually, I miss the people that used to live there and it's lonelier without them." And that was such a human response to the structure that was abandoned but was really something she remembered as a home for people who were her neighbors. So, I always kept that in my thoughts as something to keep in mind. These are places where people have lived and there's something about that.

Alie: Yeah, really made a lot of memories in that structure.

Aside: So, for every picture of an abandoned house that you see, think of your actual childhood home, think of how it would look in that state... All the mementos, all the holidays, all the firsts, just churned into a blight or a spectacle. And it really is like a death of sorts, and it makes me want to hug a house. But what about all the stuff inside?

So, Jessica Smith, Emily Stauffer, Sivvy, first-time question-asker, Sophie Fournier, Jasmine Liu, Kristy Lowrey all wanted to know: What happens to the physical objects left behind in abandoned buildings? But Judith, and first-time question-asker Taryn Selch, Jenn 'Squirrel' (wus) Alvarez, Jerry Gidner, and Brooke Williams asked, in Brooke's words: What is the strangest/coolest/scariest thing Rex has ever seen in an abandoned building?

Alie: And several people wanted to know, in that vein, if you've ever come across something, a possession or something that's been left behind that's really struck you, or you've wanted to repatriate back to someone. Have you ever stumbled upon anything in any of these buildings?

Rex: Let me think about that. I know we've asked that question of the destruction crews, the demolition crews, if they've ever pulled anything out of the structure before they demolished it. And in general, they say, no, it's mostly just stuff not of any value and it's not worth it. But there are little mementos and little kids' toys and things that you kind of have an affinity to. I've never felt the need to take any of it, but I could see where people might feel that.

Aside: Earl of Greymalkin wanted to know: If the walls could talk, would they insult us for leaving them to decay alone? Can walls talk to Rex with words?

Alie: Have you ever seen any notes that anyone's left behind in a space? I don't know if you've ever written something on the back of a door, of a place you've lived in. My dad wrote something on a house that he built for us, and he dedicated the house to my mom. And years later, after they were married 49 years, my sister happened to visit the place, they happened to be gutting the bathroom and my sister saw that piece of wood and was able to get it, give it back to my parents. [*"Are you serious?" "Oh, that's from the house?" "Are you serious?"*] But do you ever come across any notes of, you know, "I lived here from this time to this time."?

Rex: Well, you see things written on the walls, some not so nice as others. Again, some of these things are open to the outdoors and things happen in them. But sometimes you might see the measurement wall where the kids grew over a period of years, and that'll be there and you feel, again, a certain affinity that this was somebody's home and there's a group of children that grew up in this space and so that's not an uncommon one.

Alie: Ah, that's really beautiful. I hope whoever left took a picture of that before they left so at least they have that memory. A lot of people, Jenn 'Squirrel' Alvarez, Garvey's, Laura Lemon, Melissa, Sam Nelson, Joel Henderson, Ira Gray, and Earl of Greymalkin wanted to know, some of these spaces are open to the outdoors, which means they're open to people. They wanted to know: What happens if there are squatters and that building needs to be demolished or it's resold? How is that handled?

Rex: Legally. There is some possession by right, in Michigan if you openly occupy an abandoned structure for an extended period of time and it's safe for habitation, it hasn't been red-stickered, would be the case here in Michigan, where the building department might say there's "no plumbing, there's no electricity, you should not be living here," but you've occupied it, you can take possession of the property. That's rare. Most of these structures tend to be more gone than that and there are people who will stay in them, homeless individuals. But again, they do provide some form of shelter and it will be used. Now, they will be evicted, and they will be moved out through the regular sheriff's eviction process that your local government has in place.

Alie: Have you seen Fight Club?

[clip from Fight Club:]

Narrator: I don't know how Tyler found that house, but he said he'd been there for a year. It looked like it was waiting to be torn down. Most of the windows were boarded up. There was no lock on the front door from when the police, or whoever, kicked it in. The stairs were ready to collapse. I didn't know if he owned it or if he was squatting. Neither would have surprised me.

"Yep, that's you. That's me. That's the toilet. Good?"

"Yeah, thanks."

Narrator: What a shithole.

Rex: No, but I think I know the plot. [*laughs*]

Alie: I think they live in an abandoned Victorian, don't they?

Aside: Okay, I'm sorry. Movie trivia, quick note here. So, the production designer for *Fight Club*, Alex McDowell, explained in a 2016 article that the house Tyler Durden lives in AKA, The Paper Street House, was a completely fictional home, it was constructed on the outskirts of LA, but the designers gave it its own backstory saying:

We imagined that it had been built by a captain of industry, a hundred years ago... His family moved in and by the time of his grandchildren and great grandchildren, the city and the

industry encroached more and more on the countryside and the house began to drop in value. The grandchildren decided they had to sublet part of the house so they put in a second staircase in the early 60s so they could sublet the back of the house.

As time went on, the house continued to decrease in value, the family move out, squatters moved in, and the house became very decayed. Fires were set in the living rooms and in the hallways and then eventually security moved in, kicked those people out and put a fence around the property. And then the Space Monkeys moved in and started making soap.

So yes, the *Fight Club* designers made up an entire backstory for a house that didn't exist. Also, Paper Street House, why did they call it that? I found out today that a paper street is a mapmaking term for a fake street drawn into a map so that if the map is plagiarized, the original map maker can tell by the inclusion of that nonexistent ghost location, or the paper street that they put in, as kind of an Easter egg. So, we need a cartology episode on mapmaking, perhaps. But no, Rex hadn't seen *Fight Club* so... moving on.

Alie: Adrien Sala, Michael MacLeod, Ashley Green, Super_Sara, and Taylor Jacot wanted to know about ghost towns. Augh, so many good questions about this. Michael MacLeod wants to know: What's your opinion on "ghost cities" that exist in China where there's dozens of these big apartment buildings that are built and then never lived in? And then also in terms of ghost towns, I just want to know if you were ever fascinated by ghost towns as a kid, because that seems like that would lead to a career in domicology. [*Rex laughs*]

Rex: Ghost towns are a good example of abandoned communities and structures in them, and mostly in the United States... I've heard of this scenario in China, but that's not something we see a lot in the US. But we do see ghost towns and those are communities where their economy is based on a nonrenewable resource. People couldn't make a living and they abandoned their structures. They tend to be small and relatively rural, but that's the case, there are ghost towns. Certainly, we've seen in, I think out West.

And I think we're likely to see more of this. This is a predictive statement probably out of my realm of knowledge but where water becomes an issue, we're going to see ghost towns in the future there, where there's no more water to support that community and people just can't live there.

Aside: What is the biggest ghost town in the world? You're asking your windshield right now? Apparently, it's a place called Ordos, China and it's a mining town in Mongolia that was expecting a party, it was expecting a population of a million people to live there right around Y2K.

Also, did you know that there are whole abandoned whaling towns near the Antarctic? A bunch of people were like, "Let's whale some whales." And then when the Earth was like, "Yo, we're about to get 86 on whales over here," they were like, "Okay, no more whales? I'm outtie." I like to think that if these ghost towns are indeed haunted, it's by whale ghosts, moaning and gusting through phantom blowholes. [*"Do you hear that wailing?"*] But yes, resources plus greed can equal booms plus busts.

Rex: So, where you have a nonrenewable resource, like mining, or a resource that hasn't been managed well, like lumber, then you will get a ghost town effect.

Alie: Wow. That's so interesting. Sarah Meaden had a great question: What's the protocol/process for buildings abandoned because they were meth labs? They had a friend who was forced to leave their house because it was an undeclared meth lab. Is there anything environmentally that can leach into some structures in that way?

Rex: Yes.

Alie: Yeah. [*“Something called methylamine.”*]

Rex: It’s a toxic material, it’s addictive, it’s dangerous, meth labs have the potential to affect the surrounding built environment. I could see where public health officials would want to limit access to a place where that might have occurred.

Alie: Can those be remediated? Can you de-meth a house?

Rex: I suppose you could, it might not be worth the expense, but it’s feasible and you could, you know... it’s possible. But I don’t see that happening. [*laughs*]

Alie: When I lived in Hollywood, there was an apartment building that exploded because of a meth lab down the street from me.

Rex: Oh my god, oh my god.

Alie: And it was like, in the early hours. You’d drive past it and it was just charred and burned out.

Rex: I think, again, that emphasizes one of the negative social impacts of abandonment. They tend to be ‘attractive nuisances’ is what planners call them.

Alie: I remember seeing this, the whole lower floor had blown out, meth lab exploded. But now I’m remembering a couple years later driving by and it had a nice new façade and was built, and I thought, “I wonder how much of that was gutted?”

Aside: Don’t you wish you knew the full story of your home? Oh wait, wait! There’s a DEA, Drug Enforcement Administration, database that lists former meth houses or drug labs. Just simply google the Clandestine Labs list of your local government. And it’s fun to find addresses and then look up how much the flipped homes last sold for on Redfin. Also, if you live in a former lab house, just consider getting it tested if you can, because when it comes to chemical remediation... Mmm, some people do a better job than others about being thorough about the cleanup.

But for non-clandestine lab houses, in some cities and countries, there are financial incentives to remodel and keep a certain percentage of existing materials in a structure, as opposed to a total teardown, and that’s one way of steering folks to be more sustainable and, kind of, work with what they have.

Alie: When it comes to repurposing and restoration, Nina Giacobbe wants to know: What’s the coolest way you’ve seen an old building get repurposed? Are there any that really stick out in your mind that was like, “Ahh, they saved it.”?

Rex: Well, one of our examples that we love to point at here at Michigan State University is our old power plant that has been turned into a STEM, Science, Technology, Engineering, Math, building. They kept the old boiler, I mean, this is a contaminated site, it was an old coal power plant. So, they had to clean up the site, they kept a lot of the old infrastructure, it was a brick building, they’ve added elements to it like cross-laminated beamed wood. So, it’s a beautiful structure here on the campus, our STEM building they call it, that is a really neat example of the reuse of an old abandoned, contaminated site, but also utilizing wood technology for the construction of the new facility. It’s a really beautiful building, so that’s one we like to point at quite a bit.

Aside: Of course, I looked this building up and it’s just *gorgeous*, just so delightful. Lots of red brick and square angles within these large expanses of aqua-colored glass, it’s a beaut. But what’s not beautiful? Well, we talked about it in the recent Environmental Toxicology episode and it’s asbestos. Jack Sparks, and Matt Ceccato, and Mo Casey had questions about that.

Alie: A lot of people wanted to know the environmental effects of cleaning some places out. Is there a way that asbestos is dealt with?

Rex: Oh yes, absolutely. Asbestos is a cancer-causing agent and OSHA, the Health and Safety Administration, has very severe regulations regarding exposure to and removal of asbestos. And so, that adds additional costs to the removal of these structures. Even in demolition, not just a deconstruction but in a demolition, you need to take extreme caution to make sure you're not creating lead and asbestos plumes. [*"That's not good."*]

And so, most demolition is utilizing a method they call a Baltimore Method, it's called a wet-wet demolition; you have to wet everything down, keep the dust down. And then notify the neighbors, "We're going to take this structure down, close your windows, we're going to bring it down," and then once you remove that material, keep it wet so that again, you're not spreading lead and asbestos.

Aside: Also, here's a little bit more trivia. You know the "Disaster Girl" meme of a little girl who is looking back at the camera like Firestarter while there's a home ablaze in the background? Okay, very quick backstory to that. Girl's name is Zoe, her dad took the picture, kind of on a whim, sent it into a magazine, won some contests. But why did this tiny girl burn the house down? It was actually a training exercise and the person who owned the property wanted it razed so it was like a fire department training. But she sold the image as an NFT for half a million dollars, aren't you glad you know that? [*"So, we're going to take several rooms in the house and set certain fires so students can come in and investigate the aftermath."*]

Alie: Did some of them get burned by fire department training exercises?

Rex: Yes, and some get burned by arsonists. This is an interesting element of abandonment. If you own a structure, it costs you money to remove it. But if it burns down and you have insurance, then the insurance company covers that.

Alie: Aha!

Rex: So, we've actually had cases in the past, not so frequent nowadays, where a structure might be burned down intentionally for the purpose of avoiding the cost of demolition or even complying with code improvements, trying to bring it up.

Now, there's another story in the domiciology world, this is a unique scenario for St. Louis. Many of the structures in St. Louis are brick structures, it's a rare brick that isn't made anymore, it's very expensive. So, some of the older buildings there, they will burn the structure and then the night after the fire, or a day or two afterwards, the scrappers will be there pulling the bricks out, and then they resell on the market because there's value in them. And so, yes, it's arson of course and it is one of the methods that's used to bring down some abandoned structures, some intentionally, some accidentally. Obviously not something you want, because again, local government has to pay for the firemen, firemen are placed in danger, it's a danger to the surrounding properties as well. So, it's another element of abandonment that makes you wonder, why do we allow this to occur?

Aside: A few patrons, such as our own Mercedes Maitland, oh hey, asked about prevention and ConnieConnieBoBonnie asked about prevention as well. In Connie's words: Should there be laws in place that prevent people from letting properties fall apart? Why or why not? And Rex is such a good guest that he asked this question before I even could.

Rex: One of the areas I haven't touched upon with you is how do we end future abandonment that places the financial burden of the removal of the structure on the vulnerable local government, which is generally poor anyway because they've been disinvested.

So, we've been looking at two vehicles, one bonding, I mentioned the bonding model where you place a bond on a structure at its point of construction, like a cell tower or a wind turbine, and then

at the end of the useful life of that structure, that local government has access to that bond to pay for the removal of that structure so it's not left abandoned. So, that's a possibility that could be adopted by local governments.

The other option we've been looking at, and this is one we haven't really got a lot of track record on, but we've toyed with the idea, what about an insurance policy? So, when you build something, you secure an insurance policy, a deconstruction insurance policy, so that at the end of the useful life of the structure, there's an insurance company, a third-party company, that has been collecting a premium over the useful life of the structure, that is now responsible for the removal of that structure.

Such a model might encourage building for deconstruction, so you design it in such a way that you maximize the value of the materials you take out. The insurance company might incentivize that by providing you a lower premium if you design for deconstruction. Again, at the end of the useful life, the structure has more value because you can extract more value of the materials. It would create a whole new insurance economy that would support that, we wouldn't have future abandonment because there would be these insurance companies responsible for the removal of it. And so, it's another model we've talked about as possibly being a method to end future abandonment.

Alie: Mm-hm. I like that you're just a proponent for foresight. "You're like, let's think about the future here a little bit." We can't keep living in such a disposable way, especially when it's something that takes as many resources as homes.

Aside: So, the way of the future is not, Throwita Way. [*"Nice."*]

Alie: Maren Proffit, Laura Acosta, Grace Robisheaux, Miki Aso first-time question-asker, Earl of Greymalkin wanted to know about demolitions. Laura wanted to know if they still use wrecking balls to demolish stuff or if that's, you know, just in cartoons, essentially. And how when a building is demoed, in Earl's words, what happens to the foundation and things like that? Any memorable demolitions that you've witnessed?

Rex: Yes, they still use wrecking balls on multistory primarily brick structures, some cement structures, depending on the size. Essentially, you're just crumbling the building down to a pile and then you can work with the pile. You can remove some of the materials that might be salvageable from the pile. So yes, it's very common. It's not uncommon on multistory structures to use a wrecking ball like that.

Alie: Did you see Miley Cyrus' video for "Wrecking Ball"? Are you familiar with this?

Rex: No, I've seen videos of wrecking balls in action and again, it's fun. [*laughs*]

Alie: Hers is quite different. [*"I will always be the naked girl on a wrecking ball."*] What about explosives?

Rex: Still used. Again, it's a structural science and in some structures, particularly where it's built up around the structure and you want to bring that structure down, those methods can be used and can bring some element of safety. And again, deconstruction is a systemic method of dismantling a structure, it's like reverse construction in many ways. And in that context, it's a workforce training opportunity. If you learn how to deconstruct a structure, you can learn how to build a structure. So, it is seen as a workforce development tool, particularly in distressed areas where jobs may be a challenge, there may be opportunities to learn deconstruction skills and then find your way into the construction industry.

So, one of the challenges, and again, we have domicologists who are thinking about this, is there an automated way to sort the debris pile? Because human labor is expensive. If we could create a machine that would be able to sort materials, and we have some capacity with recycling to do that,

a similar type of machine that could sort structural debris and pull out what is valued and/or can be reprocessed from that which we can't use at all, then now again, we might have... there's an economic opportunity, an economic value that could be generated from the sorting of the debris pile.

Aside: So, if you are interested in this field from a hands-on perspective, you can look into jobs in deconstruction, which is like demolition but it aims to reuse and keep some materials intact. Also, get a tetanus shot. I'm your dad, I've got to tell you to do that.

Alie: And what is one thing about domicology or this field that is difficult? I'll ask you your favorite after this of course, but what's something that is the hardest part about what you do?

Rex: Wondering why more people don't find abandonment offensive. Why do we tolerate this? This is not a natural phenomenon, this is something we allow ourselves to do to ourselves, and why would we tolerate this? So that, I find very saddening and frustrating, that there's some sentiment that, you know, "It's okay, it's not my neighborhood, it's not my community, there's nothing that can be done about it," that I find very frustrating. And that, it's just sad to see that acceptance of a very horrific situation, and that's what saddens me.

Alie: Yeah. Would you say that by nature, you're an optimist, someone who has a lot of hope?

Rex: Have you heard Robert Reich's response to that?

Alie: No!

Rex: Oh, he has a really... You know Robert Reich, the former Secretary of Labor under Bill Clinton; he's a faculty member at Berkley. Dr. Reich talks about, well on Mondays, Wednesdays, and Fridays, I'm hopeful. Things are good, we're smart monkeys, we'll figure out the solutions to these problems. On Tuesday, Thursday, and Saturday, it's too much we're never going to make it. [*Alie laughs*] And then of course on Sunday we pray. [*both laugh*]

Alie: Would you say that that's pretty fitting?

Rex: I think that that's a wise way to approach the issue. I mean, some days it's hopeless, you wonder, are we going to make it? "No." And other days, "Yeah, we can!" And then, let's pray. [*both laugh*]

Alie: What about your favorite thing about this work and about pioneering this field?

Rex: The excitement I see in people who feel there is an opportunity to change what looks like an intransigent problem. Young people in particular, but also grown adults who are struggling with this, homeowners who have abandoned structures. We don't have to live with this, we can change this. That gives me hope and excitement and I get real excited... Just glad to have an opportunity to engage with individuals who are applying their talents to try to solve this wicked problem.

Alie: Is there any way that you would urge people to get involved to prevent more abandonment?

Rex: Well, certainly, be engaged in your local government, in the community that you're in. And when you see abandoned properties, draw people's attention to it. And then obviously, be a consumer of repurposed materials and salvaged materials. Help create the market that will drive the demand for the salvage of these materials and then just speak out and voice your concern. We don't have to take this. This is not nature doing this to us, we are doing this to ourselves, and we can say, "No, let's not do it," and find a solution that will work in your community.

And we've seen communities rise up. For example, just two years ago, the city of Detroit, just a year after going into bankruptcy, the voters passed a \$250 million millage to remove abandoned structures. They took it upon themselves to incur a quarter of a billion-dollar debt over a ten-year period to remove those structures. That's heroic effort by the residents of Detroit. So, a lot of the

communities are saying, “We’re not going to take it anymore, we’re going to find a solution to this, we’re going to take care of these abandoned properties, and we’re not going to let you abandon your properties here.” So, for another example, here’s another solution that people have employed. Community benefit agreements, I don’t know if you’re familiar with community benefit agreements. It’s a California invention!

Alie: I should know this. [*both laugh*]

Rex: Developer comes in, “I’m going to build something here. Really cool, you’re all going to love it, I’m going to create jobs.” The neighborhood says, “How many jobs for us?” They say, “Well... [*mumbles*]” and there’s a lot of noise but no action. So, they have legal contracts, a community benefit agreement with the developer, supported by the local government that may be investing public resources in the development that says, “You will allocate a certain amount of resources, you’ll employ so many people from the local neighborhood and you’ll build a park,” or some other community benefit.

So, some places have used community benefit agreements. If you’re going to come and build your Walmart here, this is a good example, or some other big box store, you’re going to agree to put aside a certain amount of money that at the end of the useful life of that structure, you’re going to take it down, or you’re going to help us convert it to some other use. So, they will use that community benefit agreement vehicle as a way of legalizing, a way of generating the revenues to pay for the reuse or removal of that structure at the end of its life.

Stadiums, another thing. We tear down stadiums willy-nilly, you know? And community benefit agreement on the next new stadium. “Okay, when you get around to tearing this one down, you’re going to employ our folks in the deconstruction jobs, and you’re going to divert most of these materials, and you’re going to reuse some of this material and you’re going to build us a stadium that we can take apart,” like they did in London during the Olympics, the basketball stadium, because they don’t play basketball in London, [*both laugh*] or they didn’t then.

Alie: I’m sure somebody made a wood floor out of that, right?

Rex: And the seats, and all the other structural materials there. It was a pretty substantial investment that they reused.

Alie: This has been such a joy. You’re doing such great work and I’m just so excited that you put a name to this field because it’s so important. I’ve had you on my list for years and it did not disappoint at all so thank you for letting me ask you so many questions.

Rex: Thank you for giving attention to the field of domicology. We have many partners and you’re one of them, thank you.

So, ask smart people not-very-smart questions because I promise you, they’re actually good questions. And now you’re never going to look at a vacant house the same. To find out more about Dr. Rex LaMore and the cause he chose plus other episodes that we mentioned, you can see all the links in the show notes. You can follow us @Ologies on Instagram and Twitter. I’m @AlieWard on both, say hi. I’m @Alie_Ologies on TikTok.

Smologies are shorter, kid-friendly, G-rated episodes, and you can find them at the link in the show notes or at AlieWard.com/Smologies. Tell your friends with kids, or your DANKs who are looking for G-rated content. Thank you, Mercedes Maitland and Zeke Rodrigues Thomas for editing those. Thank you, Erin Talbert for adminning the *Ologies* Podcast Facebook group with assists from Boni Dutch and Shannon Feltus. Thank you, Noel Dilworth for all the scheduling, Susan Hale for handling

merch at OlogiesMerch.com and so much else in the *Ologies* world. Thank you, Emily White of The Wordary for making professional transcripts available on our website and linked in the show notes. Kelly R. Dwyer works on the website. Mark David Christenson helps with editing, as does the man, the myth, the legend, Jarrett Sleeper. And lead editing is performed by the talented and kind Mercedes Maitland of Maitland Audio. Nick Thorburn wrote the theme music.

And if you stick around until the end of the episode, I tell you a secret and this week's secret that you didn't ask to hear is that I got my first colonoscopy this week. Wow... wow, wow. What an experience. What a milestone for me. Did I bring my recording equipment to the hospital to make a Field Trip episode with tips? ... Who do you think I am? Of course, I did. Did I also go to a bar a few nights beforehand and ask strangers for colonoscopy tips and did it go very, very badly? It did. Really, one of the worst social events of my life and I can't wait for you to hear. So, stay tuned for that whole beautiful mess, coming up.

Also, I am recording the asides for this episode in my car today because I had a dentist appointment and it's raining, and in some of the asides you may have been like, is that the pitter-patter of rain on the rooftop of a car? And it was. I'm not really sorry about it. I hope it was ambient for you. The restraint that I showed when I saw a tiny, tiny poodle walk past when I was recording an aside about Disaster Girl, I... ohhhh, I wanted to say something, but I didn't. But it was so [*high pitched*] cuuuuute, it was so tinyyy! Now I guess I did say something. Okay, please be safe, watch out for rusty nails and whale ghosts, okay? Berbye.

Transcribed by Aveline Malek at TheWordary.com

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