



Lost in the Ozone

by Gordon Tully

Client: You look worried. Business or family problems?

Architect: There are always business and family problems, but right now I'm very concerned about tropical forests.

Builder: Doing a condo in Central America? It's hard to get foreign clients to pay their fees sometimes.

Architect: No, no, I'm concerned about the amount of exotic wood we are using, and about clear-cutting the jungle. By the time my kids grow up, we'll have wiped out several million species of plants and animals without even classifying many of them first. It makes me sick.

Builder: Sure, and after a nuclear war, you won't worry about how many species there are.

Client: Gentlemen, perhaps we can take a more local view to keep this conversation from bogging down in a swamp of despair. What bugs me is that your buildings can make my kids sick. I'm worried about radon and arsenic.

Architect: Well now wait a minute, your kids aren't sick yet, are they?

Client: Not at the moment, but I worry a lot. What are you doing about radon, for example, right here, right now?

Builder: Seems like a design problem to me. Just say "radon suppression system," and I'll say it costs X.

Architect: Don't get too smug; we're both liable to be in court if we don't deal with this one. My partner in Maryland puts underslab ventilation in all his houses because of the high radon levels there. Up here, the situation is very spotty.

One idea is to wait until the house is done, measure the radon level, then retrofit if needed. After all, most systems will have to be retrofitted anyway. Another idea is to measure all the surrounding houses and then decide.

Builder: Just what we need, another uncertainty. The builder will no doubt end up being responsible, as usual. I await the inevitable regulations with morbid dread.

Client: I'm also worried about all this arsenic-treated wood you build into your houses. Arsenic is a serious poison and I worry about my kids eating it.

Architect: The regs say you shouldn't apply the preservative treatment in the field, shouldn't use the treated wood for counter tops or butcher blocks, and shouldn't breathe in the sawdust. Otherwise, the arsenic seems to stay in the wood.

Client: I've heard it all before. Who's to keep a two-year-old from teething on a piece of arsenic-treated wood?

Architect: If it makes you feel any better, it's a lot safer than the stuff we used to use. I still have a can of

creosote in my basement. I'm afraid to do anything with it, and am probably subject to fine or imprisonment for even owning the stuff. But not five years ago I was gaily spreading it all over the garden.

Builder: Can't we avoid using treated wood? Why do we need to treat sills if they are detailed right? All wood can be held up off the ground by masonry or concrete.

Architect: I have never been able to detail a house without bringing wood down to pavement at garage doors or entrances, especially now that my clientele is aging and all my houses need barrier-free entries. So I see treated wood as a godsend.

Client: What are you going to do when they stop making foam insulation blown with freon? This is not exactly a household hazard, but the kids do sunburn easily.

Architect: Economists keep talking about material substitution as if it happens by magic. I hope someone comes up with an alternative material, but I bet the price goes up substantially.

Builder: Speaking of material substitutions, what about oil-based paint materials? California has virtually banned oil-based finishes because of the EPA Clean Air Act, and New York may do it soon. I hear that at least one paint company will

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soon stop marketing oil-based products.

Architect: I am way behind on my paint chemistry, but it appears that water-based coatings work pretty well, and I know they don't cause problems by trapping moisture at the outer skin of walls like oil paint does. We've been using water-based urethane floor finishes. So maybe this one will turn out okay, although we'll have to forego the authentic shiny Victorian paint jobs because they need glossy oil-based paint.

Builder: Talk about wood some more. I go crazy when you spec stained wood because unless you use a fine-grained exotic, or some western wood, you can't do a nice job.

Architect: Maybe we just have to stop trying to reproduce beautiful softwood panelling and accept the flashy grain you get in pine, spruce, oak, and birch. There are lot of nice domestic hardwoods, and I don't feel nearly as bad using those up because they will grow again. But out West, they cut down these 1,000-year-old Douglas firs, redwoods, and red cedars and I'm sick again.

Builder: Acid rain is going to wipe out the hardwoods.

Architect: Oh, Lord! An old friend who is monitoring the acidity level in the Berkshires told me she is finding pH levels ten times as acidic as a soft drink! She asked me what I was doing to protect my buildings from the acid.

So what should we do, go on strike until the naughty people stop buying coal-generated electricity? Maybe I could learn to eat magazine articles?

Client: So what are you doing? Is all the flashing in my house going to rot out from sizzling rainfall?

Architect: I must admit I haven't put my mind to it. What about lead-coated copper? Does it repel the acid, or will the acid leach out the lead and make the soil toxic? Every time I think of a counter-measure, I think of a reason it may make things worse. At a minimum, we need to realize that all metal parts will decay more quickly than normal, and then make building budget decisions accordingly.

Builder: So let's see if I have this straight: Humans build shelters that make people sick and use up trees. In the process, they wipe out almost as much life as that alleged comet or volcano 65 million years ago that killed off the dinosaurs and ended the Cretaceous era. To provide themselves with energy, they burn coal and destroy more forests and lakes. Then to keep from using energy, they use Freon in their insulation and blow out the ozone layer with God only knows what consequences. They recycle their toxic wastes into the jungle to speed up the extermination process. Seems

to me that beetles in the rain forests do better.

Client: Calm down—stay local.

Architect: Okay, what is the U.S. building industry doing about all this? Do we see leadership and long-term thinking?

Builder: Some of us try to break out of the mold, but it's hard to take a long view, especially when the clients don't care much.

Architect: Exactly. Builders are backing into the future because they are afraid of their customers. Despite the fact that some of their buildings will be around until 2100, most builders can't look beyond the end of their nose.

Builder: So what should we do, go on strike? "No more houses for you naughty people until you stop buying coal-generated electricity." At least I wouldn't be overworked. Maybe I could learn to eat magazine articles.

Client: Why don't you form an association of builders and designers who care about people and the environment as well as profits. You could help teach people to build smaller, better homes with radon control, concealed arsenic, freon-free insulation, replaceable domestic wood species, and, while you're at it, lots of energy conservation and some solar.

Builder: But isn't that exactly what all the solar and environmental folks have been trying to do since 1973?

Client: I'll admit it does have a familiar ring.

Architect: I think the solar groups went wrong because they were locked into promoting a cause instead of investigating the situation. What I would propose is information gathering and dissemination to builders, designers, and their clients. There is lots of info out there, but it is not getting to the people who count. If I had the right info, I could make much more responsible decisions.

Client: Sounds good to me. When do I join?

Builder: I'm ready. I'll be glad to serve on the board of directors as long as it doesn't meet too often.

Architect: Unfortunately, I'm absolutely under the gun and can't spare a minute. I have to work out some teak and mahogany window details before the weekend is over. Gotta run—see you later gang! ■

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