By Design

Multiplying Space with Stairs

by Jamie Fisher

When confronted with a stubborn layout problem, I go right to the stairs. Of course, stairs can be frustrating in their inflexibility. You can't cut across a stair. You can't access a stair except at a landing. You can't make stairs serve a second function, or furnish them, or make them shorter or narrower to suit the space at hand, or cut back the headroom to suit the floor plan above. Stairs insist on a certain amount of space, and they don't share well.

On the other hand, stairs can do marvelous things (besides getting us up and down). Their configuration drives the organization of a house, determining where you arrive at a floor and what direction you are moving in when you get there. Hardly a floor plan problem exists that cannot be alleviated by manipulating the stairs.

Searching for Kitchen Space

A recent kitchen renovation illustrates this. It was a typical problem kitchen in an older house (see Figure 1). Along with being outdated, the kitchen was cramped, especially in the breakfast area, and the main traffic pattern went straight through the work area. The owners' wish list was pretty standard: Besides all new cabinets, countertops, and appliances, they wanted a work area outside the traffic flow, a comfortable in-kitchen eating area and, if possible, more room all over. They also wanted a new deck where they could sit and

enjoy the commanding view and perhaps eat meals in pleasant weather.

The obvious strategy was to expand east into the side yard to increase the size of both the kitchen and the eating area. Unfortunately, setback restrictions prohibited this. Expanding to the north would elongate the kitchen, but it wouldn't solve the pinch at the breakfast table, nor would it let us rearrange the space.

Straightening Things Out

Squeezed between the stair on one side and the side yard on the other, the kitchen appeared doomed — until we started playing with the basement stairs. The key was converting the stairs from a switchback to a straight run out the back of the house. Extending the

Before After Ref. Bath (Bath (Kitchen Kitchen work area Side yard Bedroom Bedroom Dining area is congested Down to Stair before Original basement extent of house Back door New deck

Figure 1. The clients wanted more space and a better traffic pattern in their old kitchen (left), but could not expand to the side. Expanding to the back solved the problem, however, once the basement stairs were changed from a U-shape to a straight run (right) — a solution that actually multiplied the space gained.

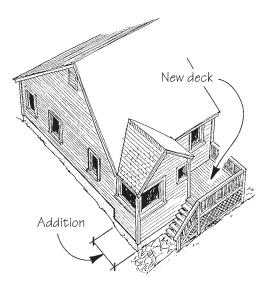


Figure 2. The new plan adds interest to the rear of the house, while the larger, more easily reached deck provides a place to eat or enjoy the view.

lower run by four treads brought that run up to the kitchen level, eliminating both the intermediate landing and the steps that were taking up valuable kitchen space. It also raised the back door and the back deck to kitchen level, improving the view and making it easy to serve food to a new, higher deck.

This strategy required adding 4 feet to the back of the kitchen (Figure 2), but because it let us lose the old landing, it won us even more space than we added — a sort of multiplier effect you can get if you use stairs well. The extra space was welcomed in the kitchen, as it enlarged the eating area and allowed the work area to move out of the traffic lane, making the kitchen function better.

Access to the new deck and an easier, smoother exit out the back are extra bonuses. The only real drawback is that the trip from the yard to the basement involves four steps up followed by four more down that weren't necessary before. However, since there is a level shot into the basement through the garage at the front of the house, the tradeoff was worth it.

Jamie Fisher is an architect in Seattle, Wash.