

[Transcribed from <http://uk.youtube.com/watch?v=MBrEjT-dWU&feature=related>]

There are many cases where making the performance of a part worse will improve the performance of the whole, but I've never seen a manager who acknowledges that. But there's one profession that knows it intimately – and that's the architect. See, I used to be an architect – that's where I started, before I was saved.

And I was working in an office, when the first opportunity I had to design a house came about. A family came in: they had bought a lot out in the country. It was a beautiful lot, in a heavily wooded area, on the side of a hill, leading to a ravine and a lake; it was just beautiful. They said:

- we want to build a 2-storey house into the side of the hill
- enter from the upper level, where we'll have the living quarters; down below we'll have the other stuff, and it will let out at the low level of the hill
- upstairs we want 3 bedrooms and 2 baths; we want a powder room; a utility room for the laundry; a living, dining room and kitchen all in one big room: one big open area; separated functions, but open area
- down below we want a large room for the kids to play in, or to hold parties; we want a work room – an office for the master of the house, to double as a guest room with a bed; a utility room for the furnace and air conditioning
- we want a 2-car garage with a workshop at the back end of it
- we want it to be contemporary architecture, built out of wood so it blends in with the forest
- this is how much we would like to spend

I said: "Give me a week, and I'll have some sketches for you; come back."

Have you ever watched an architect work? Well it's interesting, because you learn a lot by doing it. What does he do? Does he draw a picture of the rooms, and then say how do I put them together into a house? Would you guess that's what he does? What does he do? He draws the house first. It has no parts; he draws a picture of the whole without parts. Now he has the conception of the whole, and he puts rooms in. Then he looks at the rooms – boy, this bedroom is terrible – it comes out as too long and narrow, it's not a comfortable room and doesn't have cross-ventilation. So I'm going to have to have to change the room to improve it. But now he employs a systems principle: I will only improve the room in a way which improves the house.

If I can make the room *worse*, and make the house better, I will do it; because the objective is to build the best house, not to build the best room. Now you say that's good academically but doesn't happen in practice; well it sure as hell does, and I'll give you an example because it happened in that house. With the design completed, we put it out to bids and got a contract: we were ready to build it, and the housewife called me.

She said: "Russ, I can't wait to move into that house, I just love it! But there's one part of it that really worries me. The playroom, the party room, is down below the kitchen; and I'm going to be running up and down the stairs all the time, carrying drinks and hors d'oeuvres, or cookies for the kids, or breaking up fights. I'm going to be up and down the stairs all the time. Can't we put a dumb waiter in?" You all know what a dumb waiter is. Sure we can put a dumb waiter in, but the only way of doing that is by taking counter space away from kitchen, that will make the kitchen harder to work in. She said: "I don't care, I want a dumb waiter." She got it.

Now look what she did: she made the kitchen worse, but the house a lot better. Now even [if] management doesn't recognise it, they do this occasionally. What's a loss-leader? Every supermarket has loss-leaders. There were studies done several years ago: they found that housewives on the average only know the price of 6 products. They think they know the price of everything, but they only know the price really of 6, including bread, milk, baby food and stuff like that. So the supermarket will deliberately sell those products at below cost, to get the housewives in who will then buy the profitable products, thus sacrificing a part for the performance of the whole. That's the consequence of systemic thinking, of focussing on the effect of changing parts on the whole.

How many of you have ever heard of a manager of a unit in a company telling one of his sub-units: "Next year I want you to perform less well, because it'll help the whole"? It's never been. In a corporation it's always "We want you to behave as well as possible." We're told that when every

part performs as well as possible it's the major story of the corporation

Now that's easy to see, and can be proved rigorously. If you took the 457 automobiles available in the United States and tested them to see which one of them had the best motor, I suspect the Rolls-Royce would come out as the best. Now try the transmission, probably be the Mercedes; then try the fuel pump, well maybe it's the Lincoln. And you take every essential part of an automobile, and find out which is the best one available.

When that process is complete, take those parts off those cars, and put them together into the best possible automobile. It will consist of all the best parts: Rolls-Royce motor, Mercedes transmission, the Lincoln fuel pump and so on. Will you get the best car? You won't even get a car! Why? The parts don't fit.

The performance of a system depends on how the parts interact, never on how they act taken separately. And so the fundamental thing that management in the new age must learn is how the parts of the system they manage interact, not on how they act taken separately. And business schools have to teach interactions, not actions – not how marketing works, but how marketing interacts with finance and personnel and production, that's what's critical.

You see that particularly in the next point... this is always a shocker. There isn't any such thing as a production problem, or a marketing problem, or a financial problem, or a philosophical problem, or a religious problem, or a health problem, or a social problem: there are no such things. Those adjectives are trying to work hard to tell you something, but they don't tell you a dam' thing about the problem. They tell you about something, but not about the problem: and the significance of that is tremendous.

Ah, let me get at it indirectly, by using a medical analogy for the moment. How many of you have never had a headache? [*exchange with audience*] The rest of you, who have had such an experience, how do you usually handle it, by brain surgery? Of course you don't do it by brain surgery, why? Because you take a pill: an aspirin or something like that. It contains a chemical, you swallow it, it goes in the stomach where it dissolves, the chemical enters the bloodstream and gets carried to the pain centre of the brain, is deposited there and the pain goes away. Because someone understands the way the parts in biology – the biological system – operates, it knows that the place to attack the problem is not necessarily where the problem appears. So it's a whole lot better to treat a headache by taking a pill than by doing brain surgery.

But in a corporation, we always do brain surgery. See, the Marketing Manager comes in in the morning, and says: "Sales have gone to hell in New England in the last quarter; I got a marketing problem." And now he tries to solve the problem by manipulating marketing variables. But the fact is that over 90% of problems that arise in a corporation are better solved somewhere *other* than where they appear: but you can only find that through an understanding of the interactions.

- The best place to start anything is where you are.
- One of the most important principles that anybody employed can follow is: it's easier to get forgiveness than permission.
- The only thing harder than starting something new is stopping something old.

And if I just start, then one of two things happen: you will succeed, and the thing will spread and you become a hero, hopefully; or you get fired. There is no way of running a riskless transformation or revolution. Now I can understand why somebody might not want to do it; they may have obligations... they may have a sick wife or sick kids, the family doesn't want to move, or you're not willing to give up your job – I can understand all that.

But if you want to create a transformation in an organisation, you must be willing to run the risk of initiating radical ideas and taking the consequences good or bad that will come with that. Now I talk from experience, because I've been kicked out of 3 universities for trying stuff they wouldn't tolerate, and I finally found one that tolerated it, where I could do what I wanted; and it wasn't easy: moving the family from one state to another is not an easy thing.

The fact is: if you want to get stuff done, you just gotta do it.