Breakthrough - Championship Living in a Computer Age
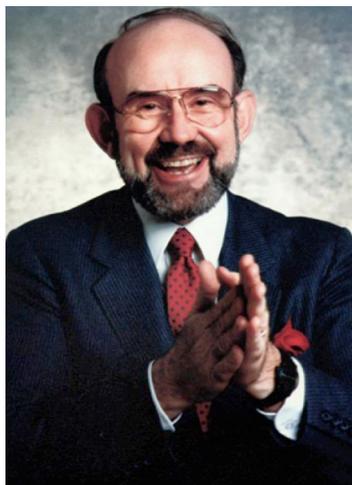## *Business As Usual*

Richard B. Byrne

Dr. Richard Byrne was the Keynote Speaker at Bio'76, which was the combined meeting of the Association of Medical Illustrators (AMI), the Biocommunications Association (BCA), the Health and Science Communications Association (HeSCA), and the Association of Biomedical Communication Directors (ABCD). His presentation was powerful, and was filled with his technical insight, personal reflection, and comedic wit. In 1985, Dr. Byrne produced a cassette tape series of twelve professional lectures, which defined what he called, "Breakthrough." The concepts presented in his Breakthrough series are universal and are applicable today. In conjunction with Dr. Byrne's wife, Mary Anne Byrne, the Journal of Biocommunication proudly included the first four of Dr. Byrne's lectures in JBC 45-2, and lectures five through eight, here in JBC 46-1.

The following article is the seventh presentation from this "Breakthrough" series. It has been transcribed from a cassette series produced by Richard Byrne in 1985. Some of the content has been edited from the original transcription text in order to provide clarity or context to the reader.

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Dr. Richard Byrne

Business As Usual

One thing we can definitely look forward to is changes in the business of doing business. So far, I've talked about changes in the technology, electronic mail, computer phobia, and new the forms of working and conducting business. You are going to see many changes in organizations, changes in relationships, changes in the politics of the organization, and changes in responsibilities. You'll even see changes in the names of things. You'll be given new titles and see new kinds of positions springing up, such as Chief Information Officers and Information Specialists. Things we have never heard of, and never thought of before. Those changes are coming.

I want to tell you that it requires a special art form of negotiation and reaffirmation of your relationships to be able maintain them with all this new technology flowing in from each side. I find myself always talking with corporate planners, particularly data processing planners and they are going crazy. You think you're going crazy? You don't know how to use a computer, and you think you're going nuts? When I speak to the head of data processing at a major corporation, where they are dealing with these fruitcake, oddball, weirdo people, like the Chairman of the Board, and managers, and so forth who are running out and buying computers. They go to a shopping mall on a Saturday night and see two eight year old kids playing with a computer and programming in Pascal or something, and they say, "By golly, now's the time! I just can't wait any longer, I'm going to do it!" and they buy $7,000 worth of computer equipment. They come in on Monday morning and walk up to the data processing team and say, "Okay, I'm ready to go, hook me up!" and they want you to hook them and their microcomputer up to the mainframe computer and then they are going to be "online." Data processing just shakes their heads and closes their eyes, hoping that just maybe, it will all go away!

You need to understand what I call 'The Law of Systems'. The Law of Systems is going to govern common sense relationships in the next five years. Let me give you a

specific example. It's a case study of what I call the hummingbirds and the elephant. How are hummingbirds and elephants different? Can you make a list for me, please, of the ways they're different? Of course you can. One is big, one is small, one is grey and one is yellow, green, red, blue and purple. One goes really slow and one goes really fast, one lives a long time and one lives about a week. So, as you can see, they are very, very different. Now, how would you use a hummingbird or an elephant? That is, which would be more useful to you, a hummingbird or an elephant? Can you see that your answer depends entirely on what you're going to do with it? I mean, if you need to move some railroad ties, forget the hummingbirds. I mean even 200 hummingbirds tied together are not going to cut it! You need to get yourself an elephant right away.

Now, what's happening in the world of business is that we are trying to integrate hummingbirds, little microcomputers, that are flexible, moveable, do electronic mail and run on penlight batteries with mainframe computers that require 84 people to turn the thing on in the morning. We're trying to integrate those. Have you ever been to a circus? Did you ever see the hummingbird and elephant act, where the hummingbirds and the elephants work together and perform together and get applauded together? You've never seen that? I haven't either, and yet executives are falling in love with their microcomputer. They go home on a Saturday, build a spreadsheet that's got about ten numbers in it, create a graph in three colors and then bring it in on Monday and say, "Now, see this? I did this myself! Isn't this great? Now, what I'd like is for you to get the mainframe to do the same thing for our company figures for the last quarter." In response, the data processing guy's eyeballs roll back into his brain because he knows it would take about seven person years to do the programming. When he tries to explain that and the executive doesn't get it, he says, "Well, you don't understand, we have an application backlog, we have work that needs to be done, so, we could have that ready for you by November." It is currently May, so it makes the executive crazy, he says, "Are you kidding me? I don't need you, man; I've got a computer of my own! I'll go off with my hummingbird and we'll show you! I'm not going to be held up by this elephant house anymore! I've had it!"

Recently, I had a laugh. I was doing a consulting job and met an engineer in a large firm. He said, "I hate them little computers! I hate them! But as long as we're going to get little computers, let's get big ones." So, he wanted to get the biggest little computer that he could find! I laughed and asked him if he had heard the George Carlin routine where he says, "I never understood the meaning of the word jumbo shrimp. It's called an oxymoron, as you know – a jumbo shrimp. It's something that's big and little. Kind of like the term military intelligence or a friend of mine that lives in Humble, Texas. I can't get around it!"

Well, microcomputers are little systems and mainframe computers are big systems and they can communicate with each other. I've already told that I do electronic mail with a big computer, but there needs to be rules, and you need agreements. One of my favorite examples of how this might work are aircraft carriers. Have you ever seen an aircraft carrier? Been on one, or know how they work? Well, an aircraft carrier is about the size of a midsize city and it will not turn on a dime. It is not able to just turn right. The guys working in the galley cooking the 50 gallons of potato soup are pleased about that. They thank God for that every day, because you know the commander would like to take a hard right, "Hard right! Let's go!" The aircraft carrier won't do that, but fighter planes will. They live on the carrier and when they take off, all of a sudden – like microcomputers, and the carrier is like the mainframe – micros can fly circles and loops and targets of opportunity and do graphs, spreadsheets and all this wonderful stuff until Monday. But on Monday, that's called landing. The microcomputers have to come back to join the big system. Have you ever seen a fighter plane as it approaches the carrier? You notice its behavior changes? It doesn't do any hard rolls with a couple of Immelmann loops and a couple of flips just before it lands. About five miles out, it slows, and gets itself aligned. It's getting ready to land, then it starts slowing up and getting lower. The whole point is that it wants to turn into a stone about 50 feet across the square end of the boat. As soon as it gets there, it quits flying altogether. Do you think pilots like that part? Is that their favorite part, getting ready to turn into a stone? No, no, they hate that part. However, it's a necessary part. If they're going to be in the system at all, they have to figure out how to land and so they alter their behavior. It's not their favorite behavior, it's their least favorite behavior, but they're willing to perform it.

When we talk about planning for the future, you can't simply capitalize upon the assets, and the capabilities of the microcomputers with all the charts and all the things you read about in magazines. You also have to keep the business running. Remember operation? Remember the burger stand that makes 50 million burgers? You need to keep the business running, you need those burgers rolling out and yet you say, "Hey, I got an idea, let's cook chicken, let's have some chicken parts here of some sort." So, for a while, you add a new thing, and it's called innovation during operation. You've got to keep going

while starting something new. It's kind of like riding a ten speed bicycle and changing your clothes at the same time. You've got to keep peddling and you've got to get changed. That's one of the tricks we face; how do we keep peddling and how do we get changed? How do we add innovation in the midst of operation without having the whole system fail? We can't simply shut the shop down and say, "Well, let's just get innovation here and then in three weeks we'll start up again!" You have to keep going and make the changes. You can learn from the hummingbirds and the elephants, and maybe even develop an elephant and hummingbird act that people will pay big money to come and see.

When you want to make these changes, how do you make these changes? When you've decided that you're going to change micros, are you going to buy 5,000 machines or are you just going to buy one for yourself. How do you do that in an organization or in a family? Or in a civic group? There are several basic strategies for this. One is that you can start from the top down. Somebody at the top says, "This is what we're going to do," and you do it. You say, "This is the law. This is what we're going to do. We're going to buy this machine and everybody is going to use it and it will get the work done," and everyone will do it. What if I told you that you didn't know it, but when you got this tape and turned it on, by golly, you entered into an agreement and the kind of computer you have to go and get is X. I'm sure that you would immediately say, "See you later," because you don't want to be coerced into that. So many organizations are contending with organized control. They are trying to establish rational and sensible distribution of the technology, and the people down at the bottom are saying, "I don't want that, I want to do this!" Now, wait a minute, it is like when mom and dad plan the summer vacation, and the kids say, "Can't we stay home?" Or the parents decide to stay home and the kids say, "Can't we go away?" That's the way organizations work.

The top down way of making changes is when a decision is made at the top about what technology is going to be used, and anyone, who is not at the top, has no control. If you were to say, "We're going to get this computer, and you do with it whatever you want to do," that would lead to chaos. It can lead to a lot of conflict in the technology or the software you use, but it gives you a greater sense of personal control like you own the technology, so it belongs more to you.

Another way of making changes is to start from the bottom up. You don't need to start at the top at all, you can start with the secretaries, doing their word processing, but the problem is that this strategy can only

go up so far within an organization, and then the people at the top will not sign on to it. They will not become part of it, because they regard that as work, donkey work, that's what the people do down at the bottom, not at the top.

Another good way can sometimes be to use what are called 'pioneers'. Did you know there are people who will do anything just as long as it's hard? You say, "It's impossible to climb that flagpole," and they quickly reply, "Well, check this out!" Remember playing truth or dare when you were a kid? I dare you; I double dare you! You know, "Stick your hand in this fan, I double dare you!" There's where Lefty got his name! Well, pioneers do that kind of stuff. They'll do anything as long as it's hard. If you were to say to them, "We are absolutely convinced that it is impossible to implement this technology here." Ten people will immediately line up and say, "I'll see you on Monday," and they will do that. Pioneers will do that.

Another possibility is what I call 'Islands of Excellence.' Find one group of people who are already distinguished. They're already your crack team. They're great salespeople or great marketing or management people. Then you say to them, "We've chosen you, you're the best people on the team, we're going to give you microcomputers and electronic mail and we want you to show us how that ought to be done. Perform a miracle here. Show us how to do that." This group will immediately develop a shoulder patch that they will all wear on their blazers. They'll develop chevrons and hash marks on their arms and form a team, because they are the excellence team, and they'll make microcomputers work.

Regardless of what strategy you use, you need to know there is no strategy that will work. No strategy that will work across the board. Let me explain what I mean. A strategy will only work for you, in your organization, depending upon your culture. It has got to work for you. So, there is no one that can say to you, "Well, the way to do microcomputers is you start top down with a lot of control," because that simply will not work in many organizations. You have to find something that works for you. It is all determined by the corporate culture.

Have you ever known anybody who has been in the Marines? In the Marine Corp, they say, "Into the swamp and face down!" and the team all says, "Yes sir! Face down." If you go to a group like a Rotary Club or a gardening club and say, "Into the swamp, face down," they will just look at you like they don't know what you're talking about. There's a different corporate culture

between these two groups. Some people might say, "I think it's awfully warm in here, don't you think it's awfully warm in here? Maybe we should get the temperature lowered in here." The slightest inconvenience is not okay with them. In other words, they're saying, "I didn't come here to be inconvenienced!" Marines don't ask things like that very much. They're up to their knees in alligators and bullets flying around, and they say, "Gee, it's kind of sticky here, a little humid in here!" You see, it's all dependent upon the corporate culture. In fact, your pride can make it such, that the harder it is, the better you like it. The tougher the challenge, the prouder you are that you're the one doing it. So, you have to find a strategy that works for your corporate culture.

Now, no matter what strategy you use, what technology, or how well you understand the laws of systems, the hummingbirds and elephants, you're going to have to orchestrate the efforts of everyone on the team. Orchestrate.

Think about it for a second. Have you ever seen as symphony orchestra? Seen an orchestra play? In a movie, on television, or maybe live? Have you ever noticed that orchestras aren't fair? They aren't fair! Just take a close look. Have you ever seen the first violin? Do you know what the first violin does? First of all, he or she comes in late. They're not even there on time and everybody else is already sitting down. Then they tune up, and everybody tunes up to that note. The conductor arrives. The first violinist stands up, says "Hello, how are you," they shake hands, talk a little while, asking about the wife, kids, and so forth. Then, when the music starts, the first violinist plays about a hundred million notes a night. Hyperkinetic. I mean it's like St. Vitus dance. Check it out. Even in the slow quiet parts, they are moving all the time. That's what first violin does. Now, look in the back row over on the left and you'll see the second percussionist. The second percussionist is standing there, holding a huge pair of Zildjian cymbals. The second percussionist is counting the 263 bars to the end of the symphony. If you keep your eye on him, you may catch the guy nodding off watching, then, "Oh, my! Where are we?" He checks around, and then, when it gets to be his time, he gets ready, and you see he holds the cymbals way up in the air, and then Bang! He waves them around, then shoves them against his chest and turns them off. Shouldn't that guy pitch in? Shouldn't he get involved in the music more? Shouldn't he play more during the evening? I mean everybody else is playing; look at the first violin! This guy is just back here counting! Obviously that's stupid. The reason it's good is that he doesn't do it very much. He only does it when it's

appropriate. He gives it everything he's got, but only when it's needed.

Now, take a look at microcomputers. How often should you turn on your computer? Every day? All day? Twice a day, for an hour in the morning and 20 minutes in the afternoon? Do you see, it depends on the score? It depends on the music you're playing together. It depends on who's the conductor, who's the first violin, who's the second percussionist? You need agreements, so that when you log on to the computer, the work you do contributes to the work of the whole. You don't want to get carried away. See, there are some people that fall in love with the computer. They have this new love affair! They are passionate! They say, "Check this out! Now I learned this lesson, check this out!" It's kind of like the second percussionist gone mad, in the back, bang, bang, bang! Smashing the cymbals! No, we need to agree on the kind of music we're creating together. We need to figure out my role, and your role and then, we need to reach the end of the music… together.

References

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About the Author

Richard Byrne was a former professor and dean at USC's Annenberg School of Communications. He was known for making computers less intimidating for all of us. In 1982 Dr. Byrne founded one of the first consulting firms of its kind, called Springboard! His company was devoted to acquainting executives with high technology. As president, Dr. Byrne traveled as far as Europe and Thailand presenting as many as 200 lectures a year. He enlivened complex computer terminology with humorous wit and common-sense explanations. Dr. Byrne, who had previously taught at the University of Wisconsin and the University of Texas, left his position as a full-time professor at USC in 1984 to devote himself to an increasingly lucrative lecturing career.

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