

## Architecture as a Living Process

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I've had a challenge being of Native ancestry. I probably had to work harder. It was like a handicap but it was good. It sort of forced me to try harder. But when I graduated and came back to serve some of our Native communities, my Elders were very important to me in giving me the guidance when I first started out my career.

They said to me, "You know, Doug, it isn't how much you know. You can study and you can learn and human beings can get smarter and smarter. But if we're so smart, how come the world is in such a hell of a place? So it isn't how much you study and how much you know, it's what you do with that knowledge that's important."

If you come back to our communities and you behave like everybody else and you know everything and tell us what to do, that's not going to further us. The important thing is to actually come from not knowing. That sometimes knowing nothing at all is an advantage. To know it all doesn't necessarily really help us. We feel that if you're trying to create a better world for your children, for our children, for our grandchildren; you have to approach life in a different way.

They said to me, "You know, the Great Spirit, He can hold all of man's knowledge in the palm of His hand." That's what we know. He can hold everything that man knows just in the palm of His hand, and what man knows is definable. What we don't know is also definable. Like I know I can't fly a 747, I know that. So what I don't know is also definable. The Elders said that from the Great Spirit's fingertips to the edge of the Universe is what we don't know, we don't even know. That's what is yet to be discovered. They said that knowledge—that power over your life—isn't really what you know. It's that world out there that you don't know, that you don't even know. That abyss, that void is the place where all creativity occurs—that is the creative world.

Einstein didn't get  $E=MC^2$  from what he knew. He was willing to stand on the knowledge that existed and leapt out there and discovered something new. Knowledge is to be used as a tool.

The Elders said that the land of the Eagle exists from what is known to the edge of the universe. That's where power exists because known information has already

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Mr. Cardinal's keynote address is reprinted with permission from Val Friesen and Madeleine MacIvor (Eds.), *Conference Proceedings of the 4th Annual Conference of the Canadian Aboriginal Science and Technology Society: Celebrating Aboriginal Scientific Successes: Maintaining Cultural Integrity*, September 26-28, 1996, Vancouver, BC: First Nations House of Learning, University of British Columbia.

Mr. Cardinal talked about and showed slides of his building projects. This summary attempts to capture the essence of his speech, using his words.

been created. Human beings have this gift of creation. To create something is creating something from nothing. So there's power in nothing that's yet to be created. There's true power in a blank sheet of paper because that's an opportunity to create something. And the Great Spirit has given us the power to create—the power to create a new life—the power to create new technologies, the power to create. That's where our power is as human beings. We are creative human beings. We are God-like creatures. Remember that—that we can create any life that we wish to create.

And the Elders said to me, "You must be responsible." Human beings are not responsible for their power. We human beings have this gift of creation and we can create anything. If we say we want to fly, we create flying machines and we fly. We say, "Let's fly faster than sound." We do that. "Let's go to the moon and back." Great, we do that. We have this tremendous power of creativity. But we have to be responsible. This is something they said you have to discover. You have to discover your own power that's within you, and then you can make a contribution to us, and not only our community, but to other communities as well. But once you discover and take responsibility for the power that's within you, then you have the opportunity of making a contribution. You become, as our Elders say, like a shaman—you can make things happen because you will to make it happen.

So they say to me, "If you have a vision and you have a dream, you can make it happen. But you have to do it in a certain way." You declare your vision very powerfully, you declare like an oath, like an oath to the Creator. You declare this vision very powerfully. And all you have to do is keep your word, and that vision occurs, that vision happens. But the problem with us human beings is we don't keep our word. And we don't take responsibility for not keeping our word. And that's why our visions do not happen. But if you keep your word ...

It is most important to be rooted in the traditions of the Elders in facing the 21st century. There was an Elder when I was working with the National Museum of the American Indians in Washington. For the first time, he walked out of a village in Brazil and passed the next village, and for the first time in his life he took a bus to the next village where they had an airport and he flew to Washington and got off the plane. And his message was to us all that if we are to face the future, he said, "You will have to face the future with a drum in one hand and a computer in the other." And he says that's how to face the future—he says it's the right and left arm. You need both arms in order to face the future. It was a wonderful message. He said it much more eloquently than I could, of course, but it was a wonderful message.

So I believe firmly in that, and I will share it with you by sharing with you some of my work and the journey that's taken me through getting some of these projects into reality. Because these are all dreams. I have the opportunity of not only making my dreams into reality, but people come to me and ask me to bring *their* dreams into reality. And that's a wonderful opportunity I have in bringing other people's dreams into reality by following the traditions of my Elders.

When I first started my profession, I thought, why are we building boxes in grid—like cancerous growths, polluting rivers and everything else? Why are we expressing all of our doodlings in European forms? Why not have buildings that

reflect our own wonderful natural environment? Like southern Alberta where I came from—look at those wonderful sculptural forms. I wasn't inspired by our cities in my art of architecture. Everybody has a different field, the science of architecture was something that I was interested in and I felt more inspiration from these forms [from the natural world].

When I first started this church [St. Mary's Catholic Church, Red Deer, Alberta], it was a challenge for me being brought up in a residential school. The first thing the Elders said was: "What you have to do is forgive. There is true power in forgiveness, and it is right that you should do a Catholic church because then it will relieve you of the burden that you carry, and the anger and resentment." So my first commission was a Catholic church.

They wanted a church designed around the new liturgy. [There was] a budget for the same price as a wood box—the last church burned down. And so my challenge was to design this church within the budget. And so I designed a church, wrapping the church around almost like a seashell growing from a sea creature, wrapping the building around the function.

But I had a challenge, and that was to build this roof. They wanted a concrete roof—a 120-foot span. Because the last church burned down, they wanted to use very strong materials. Now at the time, the roof was impossible to resolve because mathematically it took 81,000 simultaneous equations, which take seven men 100 years just to work out the calculations. So it was rationally impossible. But I felt it was possible when I walked through a forest.

The Elders said, "You know, when you walk through creation, the Creator has given you so many different examples of creating things, and just walking through a forest you can see so many wonderful examples that are beyond just the way human beings think. So don't limit yourself to what you know. Just look outside." And I saw this spider making this web, and I thought, well he's spanning a great distance with his structure. I should be able to do the same with mine.

I was determined that I was going to build this roof, so I made a declaration that I was going to build this roof no matter what. And so we just kept building the walls and everything, and I remember the whole parish was very concerned because they said you're building the walls and you haven't solved the roof! And I said, "Yes, we'll solve the roof. We can do it." So I went to my engineers and said, "OK, let's solve it. Can we solve the roof?" And they said, "No, it's impossible." I said, "We'll get new engineers," and they said, "No, no, if anybody can do it, we can do it." See—that's the problem with human beings—you have to have their backs against the wall because people are always operating from fear. And the Elders always said to me, "You know, it's fear that makes you not keep your word. It's fear that keeps you from making a contribution. Don't make your decisions by fear—guide your decisions by the contribution you will make." So we made the declaration that we could make that roof happen.

When you make a declaration, something can happen—the universe shifts. There's power in that, because you've opened the possibility it can occur. If you don't say anything, nobody will hear it. But once you say it, you have the possibility it can occur. So we said, "We're going to make the roof happen." So all of sudden, out in the universe the right people showed up—Alfred Parme and the

Portland Cement Association. We found a computer in Chicago, and all of these things occurred. By declaring this, you give the opportunity that it could happen. So all of the people showed up and we developed a post-tension structure that we supported at the centre. We poured a ring girder around the outside, and then we poured the concrete on top of that in a spiral motion. After we had wired insulation to the underside, we imbedded plastic-coated cables from Sweden into three inches of concrete and then, when we post-tensioned, it lifted 250 tons of concrete into the air and suspended it in space.

In doing this building it was impossible, and after that I had all the scars to prove that's not what could be done. I was too naïve to know that this building was impossible to do in Canada. In fact it just wiped me out; I had to go from Red Deer to Edmonton with nothing and start all over again, because it took so much energy and time, because people are very afraid when you go over the edge. People are very afraid to venture in something. So I had to start my practice all over again. But every time I started something new, I thought, oh my God, oh my God, because I could remember all the problems in building the first one. So knowledge did not help me at all. In fact I had to go on a long sweat with the Elders to knock all of that nonsense out of my head, so I would come with a clean slate again. I started realizing that known information may be good; at the same time it can be really inhibiting, because it tells you what not to do—don't be creative; don't be innovative. Doing a new project was like putting my hand on a hot stove, and my brain was saying: "Don't do it again!"

The next project was that a college president wanted me to create an environment for learning—the Grande Prairie Regional College. And the Elders said to me, "You know, if you design a building that has integrity, work with the people and really have the building evolve from people's needs, and really listen and follow a process like you do when we teach you how to make a lodge, like the sweat lodge or the sundance lodge and if you follow that with integrity, then you give the building power. Treat the building like it's a live being, like a lodge, so it has power."

So the building has an arterial system, a structural system, and everything else. When I started creating the building I looked at how people worked in space, how people operated in space, and I looked at the building like an organism rather than just a square box structure. In that way I developed these sketches and then I built the building around that. So I developed this parkway and landscaping along with the building because they had polluted it and it was like a sewer and I saw the opportunity of returning it and making it a feature in the community.

And why not have brick being used as a sculptural form rather than put in boxes? Interiors should be—you know, the worst thing I think you can do is to bore people to death, and I think that's what happens in our buildings, they're boring. We are supposed to be intelligent human beings, and we've created Vancouver, and we've created New York, Chicago, and all these places. Who created those nightmares? It was us! Somebody's got to take responsibility. No wonder people are brutal in those cities, because we've created a brutal environment. If you create an environment, you're affected by it. What you create also can affect you. So it's quite a responsibility.

Why not have all the people participate: acoustical engineers, mechanical engineers—all these wonderful scientists get together and we create it together, rather than have a room like a box and have all sorts of acoustic problems that you have to talk into a mike for people to hear. You can talk on the stage there and the sound reflects back to the audience and everybody can hear what you have to say. So we can use science in different ways, but also the Elders said, "Make it from the heart, make it beautiful. We always did things beautifully, even our clothes, everything. Art was not a separate world in our language. It was the way we lived."

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Young people of Edmonton at that particular time felt there was some doom and gloom about the future. And they all had young kids, and they said, "We want to celebrate the future. We don't want to have doom and gloom for our children. Why not develop a space science centre which looked at space and technology as an exciting thing for the future?" They had this vision, and they came to me and they didn't have any money or anything, they just had a vision. We sat down and created this space science centre for them, and then pretty soon everybody got really excited, and Edmonton made it their centenary project, and the Alberta government and the federal government [came on board], and then they went out and got everybody in the communities to donate money and they made it happen. We had to build this very quickly, and we responded by using the latest computer technology which we had developed years before.

The problem was that I always followed my own traditions, and I didn't feel that I had to shelve all the traditions and turn my back on my own Indian community to be able to be successful. And it was always a problem because sometimes they would come to me and say, "How can an Indian handle millions of dollars of my money?" They had all these stereotypes about Indian people. And it was particularly difficult when I started really following my culture and made no bones about it. They looked at me like I had a bone in my nose, you know, because I liked following the old traditions. And I had many of my commissions dropped because they didn't trust me, because progress meant you had to—you know, if you go to the National Museums there's dinosaurs there, and then there's Indians, and then all of sudden they progress through technology and you have space age people. They're usually blue-eyed blondes—so then, as a result, it was really difficult to take on this challenge, and all of this pressure for me to get rid of my Indianness so that I could join the new, advanced 21st century. So then I thought the best way of doing it was to be the most advanced firm in North America with use of technology.

So what we did was we totally computerized. We became really advanced in that technology, and we gave papers in Washington about the use of CAD and all that. So really it would bend their minds to think that, here's this architect who is in his lodge with his eagle's wings but there's all these computers in his office, so it really bent their heads. They couldn't say that I was Stone Age, because I was Space Age. Anyway, we had this space science centre we did which was a vision of these people. And we pulled it together. It was our seventh building totally on a computer, and we had a lot of fun in doing it.

In this work, the Elders are very powerful to me. You know, you can really soar like an eagle when you have that solid spiritual support. Unfortunately, the rest of my office, my team, did not have that strong support. So when I went and I learned all this computer technology, and I went down to Texas where anything is possible, because in Canada they said it couldn't be done, so I had to go somewhere where people said, "Yes, we can do it." They programmed all this equipment and trained us, and I came back to Canada with all this equipment and I put it in my office and I thought, boy, everybody is going to be excited. No way!

You see, they were all frightened to death because it was something different, and they weren't going to change doing it from drafting with pencils and everything. No way. They were hanging on to the past for dear life. And some of them would come into my office and sit down and cry because they thought they'd be turned into automatons if they stood behind a TV screen on a computer. I said, "Hey, it's just a tool, it's a wonderful tool. It's an opportunity. Let's treat it as a tool. Let's have mastery over it so that it doesn't master us. Let's have mastery over it—that's the challenge. As architects we're supposed to be masters of our technology." But no way. Because they were afraid. What I had to do was like what Cortez did when he first came over here: I had to burn their ships so they wouldn't go back. I had to take the pencils and drawing boards and everything out of the office and put in computer terminals, and then say, "OK we have a deadline, guys, sink or swim." That was the only way that they would progress, because nobody will be willing to jump off that little world of what we know, and that's what keeps us small.

My Elders said to me, "You know, do you want to play in that small little world of which you know, or do you want to explore the vast universe, that unknown world out there?" They said, "Now where does a warrior play—in this little world here of which you know, or this vast world of which you know nothing about? The small little world of which you know is no place for a warrior. A warrior stands on that world and is willing to leap off that world. That's the land of the eagle. That's where creativity occurs, because that's where all possibility occurs. There's no possibility in this world of what you know. There is only tremendous possibilities if you're willing to stand out there and leap off the edge. Because that's where true creativity exists; that's what we have to do to create a new life not only for ourselves, our children, our grandchildren, but to make a contribution to other people living in a small little world."

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### *The Museum*

When I got there I saw that the Museum was to be built in Hull, and all the buildings on the Hull side, the French side, turned their back on the English side, on Ottawa. And I noticed that all the English buildings in Ottawa turned their back on the French side and the river. So these so-called two founding Nations have their backs to each other with this wonderful Ottawa River in the centre. So I thought if I was going to do a National Museum that served everyone, it should face both sides, and it would start an opportunity to develop a circle around the river to join the Nation in a circle, so that's the planning that developed for the Museum.

The Elders said to me, "You know, you must realize that you're on a very magical experience here, that life is a magical experience, and you're a magical creature. You have this power of creation, you're a magical creature. Now when you go on the site, you have to realize the building is already there. It's in the future. You have to understand the responsibility you have. You are the grandchild of all the grandfathers that came before you, and you are the grandfather of all the grandchildren that come after you. Within you is the past, the present and the future. Everything you do affects the past, the present, the future. Every step you take, you have to be responsible. And when you walk on the site, the building is already there. It's just in 1990. Now you can sense and feel it, so just feel the power on the site." So I sketched these things when I walked on the site.

It was a completely impossible project, and there was a point where it was just totally impossible to do it. And without the support of the Elders, there was no way we could do it.

The Elders' vision was that the building should personify the rocks and the continents on which we founded our land, and that the glaciers came and melted and carved these rocks, and we worked with the land, and were part of the land, and evolved from the land, and that the forms should be entwined with male and female forms and natural forms to show that we evolved from nature and that our future is in living in harmony with nature or else we will have no future. And that's sort of the theme of the building. That's what message the building is, that's what it sends.

So when they look at Parliament, and whenever they look across the river, they see an Aboriginal statement across from Parliament, so they know the Indian people of Canada are alive and well and in their face every day.