



ESSAY

Connecting: The Power of Others

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Connecting: The Power of Others

DI Managing Editor Michael LeFevre suggests new skills for connecting teams

Why Do We Need to Connect?

Why do we need to connect? Isn't design an act of synthesis?

In architectural school, the AIA canons and in practice, the notion of serving and protecting the health, safety and welfare of the public has been ever-present. So have architectural patrons. For most, architecture has historically been a luxury — experienced and afforded by a privileged few. While architects are taught to consider and include all factors, along the way, some factors get weighted more than others. The idea of serving our neighbors can sometimes get lost; so can that of working with them.

Separate but integral to the consideration of who we serve is the understanding of how we design and who does the designing. We're taught that "someone has to decide" — and that the decision is the architect's province. "A camel is a horse designed by a committee," the saying goes. By contrast, good architecture is the result of a singular vision, a work of art. But who can do it all? Certainly not me. In fact, the design of contemporary buildings now takes a village, an army of experts. It's about "we," not "me."

But who leads the village? And do they know how?

A World Connected

In a world now reeling from economic, social, health, environmental and political crises, the design and construction of a building has become a complex undertaking. Gone are the days of the lone designer's singular vision, comprehensive competency and simple scope. To live up to our mandate to protect society and serve multiple concurrent crises, designers need a growing phalanx of team members. Most would agree with this premise. More difficult is realizing that most of us need help in learning to lead teams.

The Science of Teams

Business schools around the world have taught collaboration for decades. Capstone projects, group assignments, and syllabuses have long shared the science of realms such as organizational behavior and industrial relations — now likely renamed to suit new media, forms and technologies. As early as 1965, Bruce Tuckman's research outlined forming, norming, storming and performing as group development stages. Students in many disciplines and professions, including business, psychology, medicine and law, have had exposure to the science of group dynamics and possess the capacities for psychology, communication and empathy, which drive collaboration. Such personal development includes acquiring the ability to admit when you're wrong, being vulnerable, considering alternatives, welcoming diverse input and skillfully drawing out engagement by less practiced, less comfortable team members.



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But unless they acquired them in their pre-architecture education on their own, most architects don't have these skills. Perhaps that explains how many of them act and interact. The prefix "inter" means between. It implies the need for, presence of and engagement with others.

New Skills

To cope — even thrive — in the new connected world, built environment professionals need a host of new skills. Skills they likely didn't get exposed to in school and maybe not in practice. What new skills do we need?

Speaking Skills

Seeing these needs 20 years ago, I stepped outside the design profession to work in a position of my own creation — as a design liaison and manager within a leading national construction management firm. This gave me ample opportunities to listen to countless design principals from leading firms struggle through never-ending, boring, jargon-filled design presentations. With little thought having been given to structure, outline, message, timing or what the client and CM team wanted or needed to hear, the presenter would launch into the dreaded design-principal-presentation-diatribes:

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When they were done presenting, we all thought: "OK. It's wonderful that you have an abstract, intellectual design idea. But what are the materials? Are they in budget? Will they leak? Are they local, sustainably chosen and maintainable? Will they help the client do their work?" Enough about "we," meaning the architects. How about some discussion about us, the client, the builders and the rest of the team it's going to take to get this done?

As a 30-year design-focused architect, I could speak this language. I had honed my skills to speak the lofty, design-encoded lingua franca over decades. I could sympathize with how it originated and why it was proffered — a desperate attempt to cling to and uphold design quality and integrity — but even I came to dread it, and it was hard to turn off my bias as the design sermons unfolded.

Strategy and Messaging Skills

To stave off the inevitable credibility loss that would result from such presentations, I offered to coach teams in advance. But even that posed problems. First, the architects saw me as a "contractor." What could I possibly know about the mysteries of design? Their bias and conditioning, despite my prior actions to give, offer help and be their advocate, wouldn't let them get past who they thought I was, who I worked for, and how they perceived my motivation, as they had been enculturated to for years.



Second, even if they had wanted my help, they were incapable of managing their design process to allow time to finish design early enough for practicing and honing their message to be more targeted and effective. They were still designing, documenting and coordinating right up until midnight the night before the presentation. It's what their education, experience and firm culture conditioned them to do.

In contrast, consider the process we used to produce what we called the “shelf document” at Holder Construction. For each pricing proposal, option analysis or presentation, a work plan would be prepared showing

substantial completion of the effort and its documents several days before it was to be presented. It was ready to be put on the shelf, hence “shelf document.” Religiously meeting those shelf dates allowed us the benefit of having time to check, refine and hone the message before we delivered it. The facts — and the price — were unchanged. But we allowed time to practice the message and give courtesy calls to our design partners and the owner to give them a heads-up (contractor lingo) courtesy call in advance so there were no surprises or teammates “thrown under the bus” on presentation day. Quite a difference.



Thinking keeps us strangers from one another; prevents empathy.”

—Philip Lopate

Those of us interested in communicating with others should remember to consider their context and redirect our language in terms they understand. If speaking to a CEO, consider tailoring your comments to the kinds of things chief executives care about their facilities, like ROI, employee satisfaction and productivity, building and energy performance and sustainability. If addressing an entry-level BIM coordinator, it's fine to roll out tech-nospeak, because it's required and expected in this context. Different audience, different approaches. Before you open your mouth or start to tap out an email, pause and reflect. Think first: who am I sending this to and where are they coming from? What do they care about? How do they speak?

Listening Skills

Even more important than speaking in the right way to the right audience is developing the skills and motivation

to listen to them. The adage tells us: we are born with two ears and one mouth for a reason. Too often our task- or self-focus has us forming our next thought, defense or argument while someone else is talking. We're thinking instead of listening. We are failing to give our most important gifts: our attention, our care, our empathy.

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What's the secret to listening and caring? Curiosity. We need more of it — and more of turning off our brains at the appropriate times to let the words and thoughts of others come in. Listen. Play back what you hear. Build trust. Learn to extract meaning from others, particularly the introverts. Just listen.

Empathy Skills

In my self-sought role as a design manager, I had to teach myself to do precisely the opposite of what I had learned to do in school and in my prior career as an architect. I had to learn to care about others first. The client first. The project first, in its broadest collective sense. To put others' issues first, over design, good documents or my own or my firm's own agenda.

Having traversed the design-construction Maginot Line, I was enlightened to find that most contractors I worked with — even young, entry-level staff — had developed empathy skills.



Their default to self-focus did not exist as it had so prevalently among architects. Young construction graduates were open to the needs and ideas of others to a greater degree than most architectural principals I had known. Maybe it was our strong firm culture, an aspect nurtured for 60 years within Holder Construction Company and a big reason for our valued reputation. Maybe it was simply a natural outgrowth of contractors' advanced ability to consider and manage risk — as a firm, as teams and as individuals. To do that requires turning off thought, bias and answers in favor of listening empathically. It means admitting and considering information that may be contrary to your own default beliefs and behaviors. Imagine that: not thinking for a moment as a way of making collective progress.

Technology Skills

I wish I could say we've evolved past these biases. It is true, things are different now. A growing number of architects are learning and practicing inclusive design. Some are even being exposed to it in school. And now, beyond good listening, good speaking and the desire to include diverse expertise, we have machines! Yes, we have at our disposal new, simultaneously liberating and enslaving toolsets to collaborate live online in central, shared, accessible databases. But do we have the skill sets and mindsets to use them? Do we want to? We can work in radical new ways thanks to technology, but not all of us know how. On my last project, a \$1.6 billion-dollar facility, the owners' reps and architects used decades-old communication platforms.

To cope, the construction manager took the lead in introducing BIM; live BlueBeam studio coordination sessions; BIM 360 Glue; model-sharing; co-location of trades; drones; laser-scanning; and decision-tracking logs and databases.

In her research at Stanford University's Center for Integrated Facilities Engineering (CIFE) Kathleen Liston, a co-author of the "BIM Handbook", shared noteworthy findings on the social dynamics of BIM. Her work and images of design and construction teams offer compelling examples of the powers of empathy and team-building enabled by technology and shared, live information. In the first slide, traditional team entities (e.g., architects, builder, owner, trades) are shown seated around a table with their own copies of printed cost estimates in front of them. Huddled together within company silos in defensive groups of two or three, they whisper and strategize over "their" data. In the second shared example, teams' eyes, minds, faces and body language are alert, focused in unison on the single, "live," current dataset being shown on a screen at the front of the room. They function as a team, together, with no data loss, time lag or room for bias or interpretation to cloud the waters. They are present and focused — together. Such a difference a screen makes.

The data and the discussion becomes "ours" as opposed to "mine vs. yours." Gone are the days of "I didn't get the update" or "I was working off the old estimate." Live, shared data is now available everywhere. It helps build teams. We should use it more.

Inclusion Skills: Diversity, Equity, Race, Gender

Now — in addition to the growing complexity of practice and the connected world — due to some horrific events, we have been refocused on diversity and social equity. Because of these age-old inequities, we face a scarcity of design professionals with minority backgrounds. Many of us will need help from experts to improve our awareness, motivation and skills in the areas of diversity, equity and inclusion. Fortunately, a growing number of firms are developing specialists to help more of us become awakened to the potential of these areas.

Inclusion Skills: Discipline and Expertise

Even before our recent reawakening to racial and social diversity, for years we continued the same ill-advised behaviors with our subconsultants, treating them like afterthoughts, if at all. Too many of us thought "our" discipline or area of expertise as just a little more important than "theirs." Designing an HVAC system? "Here's your ceiling plenum, a 16-inch space above the ceiling tile. Good luck trying to route some ducts through there."

Then, after such dismissive direction, in yet another misdirected dance, the architects would reappear to carefully align the devices on the reflected ceiling plans, in many cases without the knowledge of their expert's engineering rationale or spacing criteria, only to be mis-coordinated or moved again due to data-generation loss, versioning, miscommunication or mismanagement.

On rare occasions when we tried to capitalize on the opportunity to create something integral, creative or groundbreaking, those of us so motivated would call in our expert subconsultants — civil, structural, and mechanical engineers or interior designers — to give them the chance to provide essential input that might shape design at its point of inception. These occasions were rare and in stark contrast to the norm. Under the proven practice model, we architects would analyze the program, develop a structural grid and generate the idea before soliciting one iota of expert subconsultant input. Why? Did we not consider them professionals of equal status to ourselves? Were we taught that way in school? Yes, we were. “It is the architect’s job to have the vision,” we were coached.

In my years working within a CM firm, I can recount many times in which trade contractors — brought to the table after designs had been conceived, drawn, gone over budget and in need of fixing — saved the day with valuable, insightful, creative alternatives. Why didn’t we involve these experts in the first place? Why did we wait for the inevitable conflict to rear its head? We could have avoided the need for rework and redesign altogether. We could have redirected that effort toward studying higher-performing options with better life-cycle costs. Despite what the architect thought they knew, they knew far less than their engineer did about engineering work. Even more so, in almost every case, when it came to cost, schedule, availability, service and performance — call it “reality” — the trades were far more valuable than the engineers. “Your solution won’t fit, won’t work, is unavailable, is inefficient or will break down too frequently,”

the trades repeatedly told the engineer, saving systems and designs in the nick of time. They were invaluable and clamored to be included, but our bias precluded it.

Now, in a design and construction ecosystem that has become so much more complex than the one in which I practiced years ago, we face a multiverse of players that includes sustainability consultants, BIM experts, MWBE coordinators, schedulers and many more. If we haven’t learned how to manage this multiplicity of experts by now, we better do so quickly, because the group is only growing.

To work in groups and accommodate multiple inputs, we must improve at responsible discourse and discord. As we learned painfully in the politics of recent years, we must avoid bicameralism and polarity. Where’s the nuance and the middle — the grey area? This other person is likely to be an experienced professional who cares as deeply as you do. It is entirely possible for you to disagree on an issue without rejecting the person who holds the opposing opinion in their entirety. But in the end, and in a project or business context, not all opinions are necessarily “equal.” All may not be worthy of being published or acted upon. But we listen nonetheless, then we moderate and decide. Who will be the moderators of the future?

Scheduling Skills

To the eyes of the typical architect, the average design schedule may appear to allow ample time. But looks can be deceiving.

When you analyze any design schedule, regardless of project scale, and factor in the need for input from all contributors, you'll see that each activity must happen in strict sequence, quickly, or face unraveling the sweater the project manager and her team are trying to knit. The best schedulers care — and ask — about the activities of others. They know the other activities are critical parts of the whole.

Situational Awareness

Situational awareness is a high-level skill. That is, knowing how to read context, the room and people to manage risk. Engage others, adapt and adjust. True creativity in the leadership sense is looking around corners and

involving your team to keep us all out of trouble. In my book, “Managing Design” (Wiley 2019), I situated this skill at the highest “Maslov-ian” level of the Project Design Controls Framework, the highest level of self-actualization in leadership terms. Looking for change. Anticipating trouble. Seeing it, taking collective action to avoid or mitigate it before it inevitably arrives. Plenty of my former colleagues at Holder Construction had this skill. In our renovation of the Hayden Library at Arizona State University, Ayers-Saint-Gross project principal Eric Zobrist had it. To work in groups, you should have it too. If your client is frowning when you're speaking, stop and ask why. If you know the project is hurtling toward an over-budget calamity, do something about it.



Connecting: The New Mandate

At the risk of prolonging this Andy Rooney-esque rant about the old days, with hope for the future, I'll simply say this: we **MUST** learn to connect, interact and depend upon one another. Strong team leaders of the future will know how. They'll have the communication, people and technology skills to do it. True experts will have mastered the connector's craft. One question is: Who will they work for? And does it really matter? Unless designers make a concerted effort to seek, develop and reward skilled, empathetic, creative, technically proficient leaders, the connectors of the future will increasingly come from the ranks of CMs, engineers, and program managers. If that continues, it will further relegate design to the low end of the value scale — a series of task-based, rote sequences — and we will lose the potential for truly creative, highly performing, sustainable architecture.

In our projects, each scene, encounter, decision or judgment has an action and a corresponding reaction or sequel. Anticipating and reacting to those events are the requisite tasks of designers and builders. But they can't do it alone.

In so many ways, our projects are like stories: we don't know where they're going when we start them. They are made up of characters who have wants and needs. They have plots (we call those schedules) and themes. In the universality of their struggles, our projects, conflicts and scenes resonate with thousands of others like us who battle daily for the things they love: aesthetics, budgets,



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sustainability, work put in place, quality, innovation, craftsmanship — and yes, teamwork.

Our projects even have predictable story arcs. They begin by wondering if we can find the answer to the questions: Can we get this project done? Can we work with these people?

Our projects are enlivened by inciting events: challenging designs, being over budget, antagonizing contractors or uncaring owners.

Finally, they are inevitably resolved by finding the truth: the answer to the question, can we succeed? When they are done, we reflect on the journeys we have just taken. What did we learn? Who did we meet? Did we change and grow over its course?

In our personal, career and project stories — our hero's journeys — we must seek, find and engage those mysterious strangers called "others." Only then will we realize their power and reach our potential.

In the world of connecting, it's the decisions, interactions, judgments, learning, surprise and change that constitute vitality and value. That's where the life happens — the magic and the growth. In the spaces between. In the intersections and crossings, random connections and linkages. In the frontal lobes, executive functions and prioritizations of the many, in the moving between the right and left hemispheres of many minds. To find those wonderful places demands more than one thing or one person. Don't waste your chances to create them. Keep looking. Keep moving. Keep connecting.

For all our sake, I hope we architects can look, listen and learn — to connect.

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