The architecture, people and their role in the educational context

Seven New York Architects and Their People

Through the Looking Glass

Dana Cuff

1
The words that make up the meaning of the words you read are not the same as the words that make up the meaning of the words you hear. To understand a written text, you need to be able to read it, but to understand a spoken text, you need to be able to listen to it. The way words are used in context is often different from the way they are used in isolation, and this can affect how you interpret them.

In order to read, you need to have a good understanding of the meaning of the words you read. To do this, you need to be able to recognize the different parts of speech (nouns, verbs, adjectives, etc.) and to understand the relationships between them. You also need to be able to understand the context in which the words are used. This is why reading comprehension is such an important skill.

When you read a text, you need to understand the meaning of each word in the sentence. This is called word recognition. To do this, you need to know the meaning of each word in the sentence. You also need to understand the context in which the words are used. This is why reading comprehension is such an important skill.

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For architecture. The question is: How much of what we perceive or interpret, how much of what we invent or experience, how much of what we retain or forget, how much of what we learn or unlearn, is shaped by the experience of space?

Today we are faced with a new challenge. We are not only faced with the challenge of understanding the built environment, but also with the challenge of understanding the virtual environment. The world is becoming more and more virtual, and the ability to navigate and understand these virtual spaces is becoming increasingly important. This is why we need to focus on space, not just on the physical environment, but on the digital environment as well.

Let's consider the concept of "space." In architecture, space is defined as a three-dimensional area that can be occupied by objects or people. In digital design, space is defined as a two-dimensional area that can be manipulated by software or hardware. Both types of space are important, and both require a different approach to design.

In architecture, space is typically designed to accommodate human needs, such as housing, work, and recreation. In digital design, space is typically designed to accommodate computer systems, such as software and hardware. Both types of space require a different approach to design, and both require a different set of skills and expertise.

I believe that the future of architecture will be closely tied to the future of digital design. As technology continues to advance, we will see a greater integration of physical and digital environments. This will require a new understanding of space, and a new approach to design.

In conclusion, I believe that the future of architecture will be defined by our ability to understand and design spaces that are both physical and digital. We need to be able to design spaces that are adaptable and flexible, and that can accommodate the changing needs of our society.

Hugh Hardy
Putting aside the question of how, let's consider the why. The reason the sense of connection is so important lies in the way it influences our perception of place. When we feel connected to a place, it becomes more meaningful and memorable. This connection can be to a physical environment, a community, or a memory of a place. The more we feel connected, the more we care about it, and the more likely we are to take care of it.

In architectural terms, the concept of connection can be understood through the idea of 'place-making.' Place-making is the process of creating spaces that are meaningful and engaging to people. This can be achieved through design elements such as the use of materials, lighting, and landscaping. The goal is to create a sense of belonging and identity for the people who use the space. This sense of ownership helps to foster community and civic engagement, which are essential ingredients for a healthy, sustainable community.

In conclusion, the sense of connection is a crucial aspect of architectural design. It is not just about creating aesthetically pleasing spaces, but about creating spaces that are meaningful and engage people's emotions. The more we understand what makes a place special, the better we can create places that are truly meaningful to the people who use them.
Craftsmanship was central to our first and only job between school and the army...
It should look good, and it should look like the outcome every company or organization is aiming for. The tools that work for one might not work for another, and you need to be familiar with the tools you're using. It's easy to get stuck in a rut, but don't let that happen to you. Be open to change, and don't be afraid to try something new. The tools you use might not be perfect, but they can help you get started. It's not about perfecting the tools themselves, but using them to their fullest potential. It's about finding the right tools for the job and using them to their fullest potential. It's about finding the right tools for the job and using them to their fullest potential. It's about finding the right tools for the job and using them to their fullest potential.
Illegible text beginning with "Ill tell you, I want you to wear..."
Later, the architect explained how his work involves understanding and shaping the environment in which people live. The design of a building, he said, is not just about aesthetics but also about functionality and the way it fosters human interaction. The architect described how he works closely with clients to understand their needs and aspirations, and how he uses technology to create sustainable and efficient designs. He also talked about the importance of preserving historical sites and integrating them into modern architecture.

The architect shared some of his projects, including a residential complex in New York City and a office building in Silicon Valley. He discussed the challenges of designing in densely populated areas and how he balances the needs of residents with the constraints of the urban landscape. He also talked about his experiences working in other countries and how he adapts his designs to fit the local culture and environment.

The architect emphasized the importance of collaboration and teamwork in the design process. He said that effective communication is key to creating successful projects. He also talked about the role of technology in modern architecture, from computer-aided design software to 3D printing and virtual reality.

The discussion ended with the architect encouraging the audience to think critically about the built environment and to consider how they can contribute to shaping it for the better. He encouraged the attendees to be open-minded and to embrace innovation, but also to be mindful of the impact of their designs on the environment and the people who use them.
sense, you could say I'm a physical determinist. I don't believe in free will—

Jame Stewart Polshek

than this, something meaningful. There are lots of easier ways to spend your

Figure 47 Robert Venturi and Denise Scott Brown, Museum of Art, Armory

Finally, I wondered whether he led his was making the world a better

Figure 48 James Stewart Polshek draws his work to his other (photograph by

seven new york architects and their people
When Poulton discusses the impact of observation on perception, he notes the importance of the gaze movement and the role of the observer. He argues that the observer’s point of view is crucial in shaping the perception of the scene. Poulton cites research showing that the observer’s attention and the direction of their gaze can significantly influence their perception of a scene. For example, a sudden movement in the periphery of the observer’s field of view can alter the perception of the scene, even if it is not directly focused on.

Poulton further emphasizes the role of expectation in perception. He suggests that our expectations and prior knowledge about a scene can significantly affect how we perceive it. This is evident in the phenomenon of illusory contours, where our expectation of direction and shape can create or alter the appearance of objects.

In conclusion, Poulton’s insights into the complex relationship between observation, perception, and expectation highlight the dynamic nature of how we perceive the world around us. The observer’s role is not merely passive but actively shapes the experience of the environment. Understanding these processes can help us better appreciate the nuances of visual perception and the role of observer in the shaping of our experiences.
Imagine a small town. We created a neighborhood of 70 people. The buildings were small and cozy, the streets were narrow, and the community was close-knit. People knew each other by name, and the sense of belonging was strong.

In this neighborhood, we created a space for people to gather and connect. The buildings were designed to encourage social interactions, with open common areas where people could come together.

The neighborhood also had a strong sense of community. People worked together to maintain the buildings and the common areas, and they organized events and activities to bring everyone together.

We also created a system of local services, such as a neighborhood market, a community center, and a school. These services were designed to be accessible and affordable to all residents.

In this way, we created a model for the distribution of services. People no longer had to travel long distances to access the services they needed. Instead, the services were brought to them, making life more convenient and enjoyable.

In conclusion, we created a neighborhood that was both functional and socially responsible. It was a place where people could live, work, and play together in harmony.

In the end, what really matters is the quality of life we create for ourselves and our communities. By designing our spaces with care and thought, we can create a better world for all.

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*Figure 1: View of the Convention Center in Rockefeller, New York (Office of James Stewart, Polshek and Partners)*
The arts are more than just entertainment. They are a powerful force for change and innovation, shaping the way we understand ourselves and the world around us.

The arts are a means of expanding our horizons, challenging our assumptions, and prompting us to think critically about the issues that matter most. Through music, theater, dance, film, literature, and visual arts, we are able to explore the complexities of human experience and the nature of our world.

Incorporating the arts into our education systems can have a profound impact on student learning and development. By providing students with opportunities to engage with the arts, we can help them to develop important skills such as creativity, critical thinking, problem-solving, and collaboration.

Artistic expression can also serve as a powerful tool for social change, enabling us to address issues such as poverty, inequality, and environmental degradation. Through art, we can raise awareness, stimulate dialogue, and inspire action.

In conclusion, the arts are essential components of a well-rounded education and a vibrant society. By valuing and supporting the arts, we can build more creative and compassionate communities, where individuals are empowered to create positive change and contribute to a better world.
In the human history of architecture, the process of building a physical structure from an idea is inherently complex. The designer translates their vision into a tangible form, and the construction process then brings it to life. This interplay between creativity and execution is what makes architecture unique.

When we talk about self-expression in architecture, it's often in the context of the designer's personal style or ethos. However, the concept of self-expression goes beyond the individual to encompass the broader context in which the building exists.

One of the key principles of self-expression in architecture is the idea of 'place-making.' Architects and designers strive to create spaces that are not just functional but also meaningful. They seek to make buildings that are in harmony with their surroundings, respecting the local culture and environment.

In the case of the elevated walkway in New York, the design team aimed to create a space that would allow people to connect with each other and the city in a new way. The walkway is not just a linear passage; it's a dynamic canvas for public art and performance.

The elevated walkway is a testament to the power of self-expression in architecture. It's a statement about the city's identity and future, and it invites the public to engage with it in meaningful ways. This project is a collaboration between the architect, the artist, and the city itself, each contributing to the creation of a unique public space.

In conclusion, self-expression in architecture is not just about personal identity. It's about creating spaces that resonate with the public and reflect the cultural landscape of the city. The elevated walkway in New York is an example of how architecture can be a platform for self-expression, a canvas for creativity, and a catalyst for public engagement.
The nature of the other and the social order...
However, both the architectural and the present day's situation.

The audience is engaged when they are interested in the topic, and are more likely to retain the information when they are engaged. Therefore, it is important to engage the audience from the beginning, and keep them interested throughout the presentation.

In order to engage the audience, it is important to:

- Use visual aids, such as slides or videos, to help illustrate the points being made.
- Use humor or storytelling to make the presentation more engaging.
- Break up the content into smaller, more manageable sections.
- Ask questions or encourage participation to keep the audience engaged.

By following these tips, you can create a presentation that is both informative and engaging for your audience.
Conclusion

The findings in this study suggest that the relationship between perception and recognition of buildings may be more complex than previously thought. The results indicate that people's perceptions of buildings are influenced by a variety of factors, including their previous experiences, cultural contexts, and personal preferences. Furthermore, the study highlights the importance of considering the social and environmental factors that shape people's perceptions of buildings.

In conclusion, understanding how people perceive and recognize buildings is crucial for architects and urban planners. By taking into account the multifaceted nature of perception, architects can design buildings that are not only aesthetically pleasing but also meaningful and functional for the users. The findings of this study provide a foundation for further research in the field of architectural perception and recognition, which can contribute to the development of more effective and culturally sensitive design practices.
Understanding the Designer's Role

The Client's versus the Designer's Perspective

Artists ultimately design for delight. Their most important role is a cultivation.

Is my consciousness that which influences the design of the experience? Will the experience of the designer impact the design of the experience? Might I kowtow to the desires of my clients? How will the clients act upon those desires? How will the design experience of those clients influence the design of the experience?

How do these influences manifest in the behaviors of our clients? How do these behaviors manifest in the behaviors of designers? How do these behaviors manifest in the design of the experience?

Conversely, what roles do clients play in the design process? What roles do designers play in the design process? How do designers influence the design process? How do clients influence the design process?

Artistic, technical, social, cultural, and political factors influence the design of the experience. The design of the experience is influenced by the design of the environment. The design of the environment is influenced by the design of the experience.

A Conceptual Framework for Understanding the Designer's Role: Technician, Artist, or Cultivator?
Design professionals are, of course, and always have been, critical to the process of place-making. They have a unique opportunity to shape the environment in which they work and to influence the way people perceive and experience their work. This is particularly true in the field of architecture, where design decisions can have a profound impact on the built environment and the way people live and work.

Understanding the designer's role is crucial to the success of any project. Designers must be able to communicate their ideas effectively, both to clients and to their colleagues. They must also be able to work collaboratively with other professionals, such as engineers and contractors, to ensure that their designs are feasible and cost-effective.

In many ways, the designer's role is more complex than that of a traditional contractor. Designers must be able to think creatively and to solve problems in a way that is both innovative and practical. They must also be able to consider the long-term impact of their work, both on the environment and on the communities that will use the finished product.

Design professionals must be aware of the current trends and issues in their field, and they must be able to adapt their skills to meet the needs of their clients. They must also be able to work within the constraints of budget and schedule, while still maintaining the quality of their work.

In conclusion, design professionals play a critical role in shaping the built environment. Their work is essential to the success of any project, and they must be able to communicate their ideas effectively to ensure that their designs are successful.
understanding the designer's role

common as a basis in self-interest. The fourth level in reconstruction, reached
when we expect for our own resources, has been described as the level of
expectations. The first level of self-interest is the level of personal needs.
In the needs for enjoyment, a need that is satisfied by material
resources. The second level of self-interest is the level of professional needs.
In the needs for achievement, a need that is satisfied by emotional
resources. The third level of self-interest is the level of intellectual needs.
In the needs for understanding, a need that is satisfied by intellectual
resources. The fourth level of self-interest is the level of social needs.
In the needs for cooperation, a need that is satisfied by social
resources. The fifth level of self-interest is the level of spiritual needs.
In the needs for reflection, a need that is satisfied by spiritual
resources.
Although the model is designed to be used as a reference for understanding the alignment of different elements within the organization, it is important to note that the model represents a framework for connecting the various levels of consciousness and awareness. The model is organized into seven levels, each with a specific focus and purpose:

- **Level 1: Survival** - Focus on basic survival needs, such as food and shelter.
- **Level 2: Belonging** - Needs for connection and belonging to a group or community.
- **Level 4: Transformation** - Focus on personal and societal transformation.
- **Level 5: Organization** - Needs for effective organizational structures and processes.
- **Level 6: Community** - Needs for a sense of belonging to a larger community.
- **Level 7: Social Service** - Needs for contributions to the greater good and societal well-being.

The model is designed to help organizations understand the interdependence of these levels and how they work together to create a cohesive and effective organization. The diagram illustrates the flow of consciousness from the lowest level (Survival) to the highest level (Social Service), emphasizing the importance of moving from a focus on individual survival to a focus on societal well-being.
Understanding the Designer's Role

Many environments achieve these basic goals without the input of design. However, when these goals are pursued, the role of the designer becomes more critical. The needs and values expressed by the environmental designers will align with the needs and values expressed by the users of the space. When this alignment is achieved, the environment can support the personal, social, and psychological well-being of its users.

Belonging

Belonging is a fundamental need for humans. It is the desire to feel connected to something larger than oneself. This can be achieved through a sense of community, membership in a group, or a shared identity. When these needs are met, a sense of belonging is experienced, which can lead to increased levels of happiness and well-being.

Health and Safety

Health and safety are critical aspects of any environment. They ensure that the physical and psychological well-being of the users are maintained. Without a focus on health and safety, the environment can become a source of stress and harm. Therefore, it is essential to consider these factors during the design process.

Design Values and the Physical Environment

Figure 5.2: The relationship between Organizational Consciousness and Physical Values and Physical Productivity

The figure illustrates the relationship between Organizational Consciousness and Physical Values and Physical Productivity. The diagram shows how different levels of Organizational Consciousness can influence the design of the physical environment, and how the design can, in turn, influence the levels of Organizational Consciousness.
Design Professionals and the Built Environment

This third level of consciousness recognizes the focus of great deal of professionals' thinking by contrasting their concerns with the operational efficiency and productivity of the built environment. In the context of operational quality, Figure 5.4 shows an environmental design work in terms of consolidated and modular, an example of how professional environments that foster a high level of productivity and efficiency in the workplace. This figure illustrates how the design and construction of office spaces can enhance productivity and efficiency, leading to increased levels of success. Further details on high-quality furnishings and interior design elements that foster the production and comfort of an office environment are discussed in detail.

Figure 5.3. Identifying a design with seating dysfunction. The seat is too low.
Understanding the Designer's Role

Chapter

The environment, with all its complexities and contradictions, is a challenge to designers. To design effectively, one must understand the relationships between the various forces shaping the environment. The designer must be able to discern the subtle influences that affect the design process. This chapter discusses the nature of design and explores the role of the designer in the contemporary world.

The designer's role is not only to create products that meet functional needs but also to communicate with the user. The designer must be sensitive to the user's needs and expectations. The designer must also be aware of the cultural and social context in which the product will be used.

The designer must also be aware of the environmental impact of their work. The designer must consider the materials used, the energy consumption, and the life cycle of the product. The designer must also be aware of the ethical implications of their work.

In short, the designer's role is multifaceted, requiring a balance of creativity, technical skill, and ethical consciousness.

Discussion

The designer's role is not only to create products that meet functional needs but also to communicate with the user. The designer must be sensitive to the user's needs and expectations. The designer must also be aware of the cultural and social context in which the product will be used.

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In short, the designer's role is multifaceted, requiring a balance of creativity, technical skill, and ethical consciousness.
Meaning and Internal Connectedness

The goal at this level is to create environments that support the internal connectedness or meaning and emotional well-being of the users. This involves designing spaces that are not just functional but also expressive, connecting with the users on a deeper level.

In the context of design, the concept of "meaning" can be understood as the ability of a space to evoke a sense of identity, belonging, and purpose. This is achieved through the use of symbols, materials, colors, and other design elements that resonate with the users and their cultural, social, and personal backgrounds.

For example, a community center designed to promote health and well-being might incorporate elements such as natural light, green spaces, and interactive spaces for socializing, all of which can contribute to a sense of belonging and connection. Similarly, a corporate office space could be designed to reflect the company's values and culture, thereby creating a sense of identity and purpose for the employees.

In the built environment, the design of spaces that foster a sense of meaning and connectedness can have a profound impact on the well-being of those who use them. It is not just about making spaces that are functional and efficient, but also about creating environments that are meaningful and expressive, providing a sense of coherence and purpose to the users.

Design professionals are increasingly recognizing the importance of meaning and internal connectedness in their work, and are seeking ways to incorporate these concepts into their designs. This involves not only considering the physical aspects of a space, but also its emotional and symbolic dimensions. By doing so, they can create spaces that are not just aesthetically pleasing, but also deeply meaningful and emotionally resonant.
Understanding the Designer's Role

are linked, reflected at the beginning point of the physical process. The purpose of the physical design (1) to identify and define the core of the community (2) to foster a spirit of community and cooperation among the stakeholders in the design process, (3) to enhance the visibility of the design process, and (4) to facilitate the development of a shared vision. The physical design is a central component of the design process, and its success depends on the coordination and collaboration of all the stakeholders involved.

Community Connectivity

Con nexus; a sense of place and community. The physical design provides a framework for the development of a sense of community and connectivity among the stakeholders. The physical design is a tool for the development of a sense of community and connectivity, and it is essential for the successful implementation of the design process.
Societal and Global Connectedness

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reduced by reducing dependence on the automobile. An extensive network of neighborhood paths is intended to replace the roads of the former car-oriented city. This reconnected neighborhood provides for more public parks and housing densities, while maintaining a continuous green belt.

Figure 5.6: Community connectedness. The design for this neighborhood includes extensive greenery and public spaces to enhance community connectedness. This approach aims to reduce dependency on the automobile and promote healthier, more sustainable urban living conditions.

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Understanding the Designer's Role

Although these modes of practice were initially developed for the purposes of the studio, the culture of the art has catalyzed in the broader context of society, the culture of the art and the culture of the designer have emerged as a result. This emergence is not simply a matter of context, but a matter of how the designer engages with the context. It is in this context that the designer's role as an artist becomes evident.

THE DESIGNER'S ROLE: TECHNICIAN, ARTIST, OR

CULTIVATOR

The Designer's Role: Technician, Artist, or

Cultivator

With a focus on the integration of technology, the designer's role is not simply one of production, but one of transformation. The designer must not only produce, but also cultivate and guide the transformation of the design process. This requires a deep understanding of the technical and artistic aspects of the design, as well as a commitment to the ongoing evolution of the field.

In this context, the designer must be able to bridge the gap between the technical and the artistic, creating a seamless integration of the two. This requires a deep understanding of both fields, as well as a commitment to the ongoing evolution of the design process. It is in this context that the designer's role as an artist becomes evident, as they not only produce, but also cultivate and guide the transformation of the design process.
Design Professionals and the Built Environment

The relationship between an organization's professional culture and the built environment is a complex interplay. Organizations' professional cultures are deeply embedded in the way they approach their work, and this culture significantly affects the design of the built environment. The diagram above illustrates how professional culture influences the design process, which in turn shapes the built environment.

1. Health & Safety
2. Emotional Wellbeing
3. Cognitive Ability
4. Transformation
5. Connectedness
6. Connectedness
7. Empathy
8. Systems

A focus on process, business, presentation of the value hierarchy, and practice can address many of these issues.

Figure 5.8 from M. A. Pfeffer & R. I. Book (1999)
REFERENCES AND FURTHER READING

In our work, we hope to build upon and extend the conceptual framework presented in this paper. We believe that a focus on the structural and cultural dimensions of the educational system is crucial for understanding the experiences of students and the role of educational institutions in shaping these experiences. As such, we encourage further research in this area, particularly in the development of innovative methodologies to study these phenomena.

SELECTED REFERENCES


LISTENING TO:

Clients

WHAT DO THEY THINK OF ARCHITECTS?

by Andrea Oppenheimer Dean

Perhaps nothing affects an architect’s career more profoundly or is more deeply irritating to a client than the inability to achieve mutual trust. For the client it results in unnecessary design and construction problems; for the designer it can spell failure.

Maybe that is why the roundtable of architectural clients convened by ARCHITECTURAL RECORD last April in Atlanta kept spiraling back to issues surrounding the client-architect relationship: How has it changed in recent years? What are the most valuable abilities the architect can bring to it? What are the most frequent causes for its rough periods and breakdowns? How can it be improved? One of the panel’s most striking revelations was that clients in all sectors of the economy are increasingly hiring in-house architects to plan, manage, and coordinate their building efforts. For many architects this has meant changed expectations on the clients’ part, in terms of the services they need and the manner in which they want them carried out.

In fact, four of the 10 panelists were also architects: Daniel Sniff (4 in photos opposite), director of planning, University of Georgia; J. Bradley Satterfield (9), AIA, director of campus architecture, Georgia Institute of Technology; Charles Andrews (5), assistant vice president for space planning and construction, Emory University; and Ken Gwinn, AIA (3), vice president for planning, architecture, and construction, Turner Broadcasting. Also representing the corporate sector was Joyce LaValle, president and CEO of Prince Street Technologies (10), in Cartersville, Georgia. Two Atlanta developers participated: Grant Grimes (2), president of the real estate company Ackerman & Co., and Earnest M. Curtis III (7), vice president of Carter Healthcare Facilities. There were also three government clients: John R. Butler Jr. (11), acting director of the construction division of the Georgia State Financing and Investment Commission; Carol J. Stewart (8), director of library services for Clayton County, Georgia; and Charles Pete Wood (6), a councilman from Smyrna, Georgia. The panel was moderated by Robert Ivy (1), FAIA, editor-in-chief of RECORD.

According to our panel, clients in all sectors of the economy are increasingly hiring in-house architects to coordinate their building efforts.

Let’s begin with the good news: Joyce LaValle, for one, confirmed that architects can benefit their clients in unexpected ways. She recounted taking the helm at Prince Street Technologies in 1995, when the floor-coverings manufacturer was, she said, “in deep trouble.” After acquainting themselves with every aspect of the business and its problems, the Atlanta firm of Thompson Ventulett and Stainback (TVS) helped LaValle reevaluate her company and forge a more productive marketing strategy. TVS architects persuaded her, she said, to create a new building that would exhibit the company’s products and its benevolent attitude as an employer. As evidence of Prince Street’s egalitarianism, the architects created a fully open office plan that brings views of the outdoors and natural light even to the least prestigious clerk and makes manufacturing spaces visible from the office area (see RECORD, December 1996, page 44). The message, said LaValle, is that “we’re all in this together; there is respect for everyone.” The architects also persuaded LaValle to incorporate “environmentally responsible” features, and they convinced her to redirect advertising dollars to bring prospective customers to see the building. Her experience with TVS, LaValle said, made her “a strong advocate of the idea that how [good] the building is often reflects how [good] the business is” and showed her that “really good architects can bring benefits you never expected.”

Equally enthusiastic, though for different reasons, was Carol Stewart, Clayton County’s Director of Library Services. When she selected Atlanta’s Scogin Elam and Bray Architects to design the first of three new county libraries in 1985, Stewart was an inexperienced client and only 36

Andrea Oppenheimer Dean (12 in photos opposite) is a contributing editor of ARCHITECTURAL RECORD and is based in Washington, D.C.
years old, but she had strong convictions about design. Maybe it was growing up near the Frank Lloyd Wright–designed Florida Southern University, she said, that convinced her she wanted “something unique and wonderful.” She is certain, 15 years later, that Clayton County’s award-winning libraries have lifted the predominantly blue-collar citizenry’s opinion of libraries and of itself [RECORD, May 1992, page 86].

The University of Georgia’s Daniel Sniff recounted a range of experiences. He credited Ayers/Gross/St. John of Baltimore, which created and implemented a new master plan for his university, with challenging him and his staff to rethink their thinking about campus planning and design “to where the emphasis is on memorable people spaces.” But Sniff faulted other architects for their deaf ear to clients’ needs and their arrogance. No complaint was echoed more frequently during the morning’s proceedings or in follow-up telephone conversations. “We know our systems and our campus and our infrastructure, but for some reason architects don’t believe us,” said Emory University’s Charles Andrews. “When the architect stops listening and begins to think that he knows more than we do about laboratory design, for example, it all begins to crash and burn.”

Another frequent source of frustration, said John Butler, who heads the construction division of Georgia’s State Financing and Investment Commission, is with “constructibility problems.” He testified to buildings in which “the actual details don’t go together” and lamented that too few designers have up-to-date knowledge about materials. Many architects don’t realize, he said, that “today’s concrete block is a different material than it was 10 years ago.” What he needs, he continued, and gets too infrequently is architects who are able and willing to answer his questions quickly and completely and can make decisions rapidly. Too often, he said, architects “just defend their position, defending, defending, defending, until all of a sudden it’s too late to easily correct the problem.”

Also singled out was specifications writing. When asked about its importance, whether it remains the job of architects, and how well they carry it out, the panelists agreed: specs are vital and architects are usually in charge, but many do the job carelessly and incompletely. Several clients complained of being presented with boilerplate rather than specifications tailored to the particular project.

Similarly problematic, said Butler, is a tendency among architects to install systems that are up-to-the-minute but too complex for his operations and maintenance staff. Stewart related how her relatively unsophisticated county maintenance people “simply tore new-fangled electronic thermostats off new library buildings. You put some high-tech gizmos on a building, and your staff says, ‘Wot is datay?’” he library director drawled. By the time she began work on Clayton County’s third new library, she insisted that the workers charged with the building’s upkeep approve its systems before installation. “The level of technology should not exceed the ability of the building’s caretakers to deal with them,” she concluded.

Ken Gwinner, frustrated with architects who don’t know his company well enough and are unwilling to take responsibility for their decisions and for completing projects on time and on budget, says he has “brought more and more people in-house who have the capabilities we need. We now tend to think of the outside architect as one of the players, but not the player.” Gwinner explained that he, as an architect, and his staff do a lot of planning and feasibility studies. “Only when the time is right do we bring in the architect,” he said. “That’s certainly not the way it used to be, but I think a lot of corporations moved to this method because they weren’t getting what they needed. When you hire architects who work for the company, they [need to] know what the corporation’s perspective and culture is.”

Carter Healthcare’s Earnest Curtis, who also has an in-house staff, insisted that “most architects are not close enough to the specific market to be able to fully interpret it or have never been in a position to behelpfully accountable. Owners and users are always accountable for the end product.” Like Turner Broadcasting and Carter Healthcare, which employ architects who serve as clients, Prince Street has recently hired an in-house designer. The majority of employees who deal with construction at Ackerman & Co. have an architectural background, according to Grant Grimes. At Georgia Tech, reported J. Bradley Satterfield, because funding and contracting requirements necessitate separating design and construction services, an in-house professional group has assumed the role of coordinator. And when Butler was asked whether he relies on architecture firms to coordinate state construction projects, he replied, “definitely not.” In fact, nearly all the panelists reported taking an increasingly active role in design and construction.

Surprisingly, perhaps, corporations’ and institutions’ use of in-house architects can depress architects’ fees. Grimes pointed out that when architects are brought in to function as clients, “they’re going to do everything to bring down the fees of the outside firm. It’s a competitive thing,” he said. “They figure, I’ll do the conceptual work, and I’ll only need the outside firm to draft the documents.” Yet all the panelists agreed that architects are underpaid but held out little hope for a significant change. Because architects have a low opinion of the services they provide, “we don’t value their services enough,” said Satterfield. When architects are willing to accept low fees, that’s what they get, he said. Together with other panelists, he urged designers to begin fee negotiations early rather than saving their protests until late in the bid. Butler told how the State of Georgia is trying to provide more equitable compensation by replacing the standard percentage of costs with a lump sum settlement, arrived at through negotiations that begin by establishing a percentage of costs.

What capabilities or qualities do clients who have in-house architects value most in the architectural firms they hire? LaValle, Sniff, and Gwinner stressed how important it is for the architects they commission to thoroughly familiarize themselves with the client’s company. Listen to us, Andrews emphasized. Satterfield elaborated, “It all begins with good programming, during which you form an ethic of dialogue.” Several clients reported that they are increasingly using outside architects in new roles. Satterfield, for example, described having asked a designer “to come in and look at the economic feasibility and the program, show us two or three options, and lobby various constituencies for approval.” At other times he expected an architect to meet with Georgia Tech’s
shows that there are 10 buildings just like ours doesn't mean we'll give them the job." Before making a decision, he calls former clients to ask whether the firm carried out its work on budget and on schedule, whether it solved the client's problems, whether it solved them in an innovative way, and whether the architects were good listeners. Andrews told of similarly making selections based on a review of qualifications and recommendations, of proceeding from a long list to a short list and then to interviews. In most cases, Andrews said, he prefers local architects, as do most of the panelists; they hire national firms only if the firms have a local office. "To a large extent the architects are our technical eyes and ears to find out what's been drawn and agreed to and what's being built," said Grimes. "It doesn't work if they come from out of town."

And although large firms are winning an increasingly large share of architectural commissions nationwide, the Atlanta-area clients reported hiring firms of every size, using smaller firms, for instance, for renovations, interiors, and showrooms. More important than size, said several panelists, is a firm's ability to respond quickly and well and to provide continuous service. They agreed that, in most cases, the larger the firm, the less chance that a principal will be involved—which all of the panelists considered important—and the higher the odds of having more than one project architect over the life of a long project. "That's a distinct disadvantage to us," said Sniff, who has found that as management turnover increases, so does the number of legal problems.

The advantages to the client of having the uninterrupted attendance of a single architectural firm were underscored by Pete Wood, the city councilman from Smyrna. In 1985 the town of 35,000 set out to build a new downtown and hired Sizemore Floyd Architects, Inc. of Atlanta to create a master plan and implement it in phases, completing a community center, a library, and a village green in 1991, a city hall and municipal court building in 1996, and a police facility in 1997. Unlike most of the other Atlanta-area clients, the city counted on the architect for construction supervision. "They've been there, they've been consistent, and they've kept us informed. We've counted on them to tell us what the problems are and where we are on budget," Wood said. He relied on the architects' ability to work with a variety of committees and with neighbors, business leaders, and nonprofit organizations, and he was especially pleased when the designers went beyond their traditional duties. For instance, he said, they represented the city in meetings with privatized downtown developers to make sure their designs were suitable, and they undertook a search for retailers "who would be compatible with a pedestrian-friendly, family-oriented downtown."

When the panelists were asked how many of them relied on traditional design-bid-build method, six raised their hands. Among those using alternative approaches was Curtis, whose company brings the contractor in as part of the design discussion to "find ways to reduce design costs." He was not alone in preferring fast-track or design-build because it's "more owner-involved and more of a team approach."

Paradoxically, although a majority of the Atlanta panelists stressed that architects' roles and responsibilities are shrinking, the most enthusiastic clients were those who relied fully on their architect to design and deliver all aspects of a project: Pete Wood; Carol Stewart, for whom Scogin Elam and Bray designed all three Clayton County libraries; and Joyce LaValle, for whom TVS created Prince Street's headquarters and a plant. In the end, all the participants agreed that architects should supervise construction and that "if they want to continue in the profession and keep their reputation, they have got to accept some responsibility for what they do," as Butler said. That doesn't eliminate the need for an owner's representative on site, pointed out corporate clients Earnest Curtis and Ken Gwinner, both of whom are convinced that only an insider will have the information and authority to make rapid, credible decisions.

A final question to the panel: Was there a message that they wanted to impress upon the architectural profession? There were several. "Do what you do best. Focus on your core competencies of programming, design, and construction," counseled Curtis. "Get things set up with everyone working as a team up front during programming and be receptive to ideas that may not include the latest widget," said Grimes. LaValle stressed that "every other industry in America" has gone through a process of reevaluating and rethinking the way they do business: "I wonder if the construction process doesn't have to be taken apart and put back together again, rethought altogether." In the end, Andrews spoke for everyone when he said, "Listen. Listen. Listen better. Understand the client's culture. Get immersed in what we do, who we are."
LISTENING TO:

by Andree Oppenheimer Dean

The tension—some would say friction—between architects and contractors probably began around 2630 BC, the date ascribed to the first documented pyramid and first structure credited to an architect; it was the burial place of King Zoser near Saqqara, Egypt. Yet at the conclusion of a panel discussion among five contractors, which ARCHITECTURAL RECORD convened in New York City last fall to learn about the industry’s concerns as they affect architects, J. Glenn Little, an executive vice president of Turner Construction Company, said, “If you took a group of architects from small, medium, and large firms, I bet they’d agree with everything we said.” Throughout the discussion, moderated by Robert Ivy, FAIA, RECORD’s editor in chief, the ambient goodwill toward architects was as palpable as it was unexpected. Areas of disagreement revealed themselves more fully in the panel members’ responses to questions I asked them in follow-up telephone calls.

The fact that the construction industry is thriving—it’s seeing its best period since 1984–85, according to Little—probably contributed to the contractors’ benevolent attitude. Turner, the nation’s largest construction company, projected that its 1997 sales would exceed those of 1996 by more than 10 percent, while F. W. Dodge’s market forecast anticipates a 6 to 8 percent increase in 1998 construction over 1997. Such figures concur with the
GOODWILL ABOUNDS AS CONTRACTORS DISCUSS THEIR WORKING RELATIONSHIP WITH ARCHITECTS.

TRACTORS

overall assessments and expectations of all five panelists. Richard Wolf is a principal of Alexander Wolf + Son, a New York City family-run business with an annual volume of $10 to $20 million, which specializes in renovations and other interior work. Desmond D. Emanuel is president of Sante Fe Construction, a minority-owned, privately held, unionized New York City company with an annual volume of about $100 million and a staff of 46 that “builds anything humans can function in,” says Emanuel. George M. Grant is a vice president of Halmar Builders of New York, a Mount Vernon–based firm that earned $100 million last year building mainly highways, airports, and commercial buildings. Joseph M. Stella is an officer of P. J. Stella Construction, which is beginning its third generation of existence as a Wakefield, Massachusetts–based, family-owned, nonunion general contractor with an annual volume of $15 to $18 million. Although all the panelists are based in the New York and Boston areas, they believe that their opinions are representative of those of contractors nationwide. They also agree that all members of their industry grapple with the same issues, whether their companies are big or small, regional or international, unionized or not, privately owned or publicly held.

There was, similarly, a general nodding of heads when Stella said that although there is more work than ever, there is also “far more competition than there needs to be. Sometimes it seems that a couple of firms are always keeping the margins down for everybody else. You have one or two lowbids, and they’ll get the job. You see what the final pricing is, and you walk away scratching your head. Egos are involved. The question when you see another contractor is not ‘How much money did you make?’ but ‘How much work are you doing?’” In fact, contractors are close-mouthed when it comes to their margins; that is why, when I inquired in follow-up conversations, most of the panelists treated the annual profits as classified information.

(According to the Construction Financial Management Association’s 1997 Construction Industry Annual Financial Survey, the overall net profit for all types of contractors nationwide was 2.1 percent. It was 1.6 percent for “industrial/nonresidential” construction, 3.2 percent for “heavy and highway work,” and 2.8 percent for “specialty trades.”)

Architects should raise fees

Perhaps most unexpected, the five participants agreed that the solution for many of their problems is to raise architects’ fees. These are depressed, they concurred, by owners’ attempts to achieve the lowest possible costs and shortest possible schedules. But there’s something else: “A lot of owners view architects as necessary evils; they don’t see them as adding value to the project,” said Wolf. He was not the only one to point out that the biggest losers from this drive to cut costs and increase speed are the owners themselves. “You end up with disappointed owners of poorly designed and constructed buildings,” explained Wolf, a past president of the General Building Contractors of New York State, which, he says, has taken the position that the architect should receive a reasonable fee.

Why should contractors care so much? According to Little of Turner Construction, “The bottom line is that architects are not paid enough money to practice their art and craft to the level they believe achieves excellence. Excellence doesn’t mean wasting money; it means making a set of drawings that is full and complete.” Here it is, our panelists’ most pervasive complaint: The documents they receive from architects are neither clear nor comprehensive. “There isn’t the attention to detail on either the exterior or interior of buildings, and many architects skimp on construction administration,” said Grant.

During a follow-up conversation Wolf expressed his frustration in greater detail: “It’s not unlike what Detroit was doing before the Japanese put the pressure on them. They would send out a car 98.5 percent complete and expect the dealer to tidy up the remaining 1.5 percent.” He reported receiving documents in which architectural and engineering responsibilities remained uncoordinated. And, Grant said, he has had more than one brush with architects and their consultants limiting the amount of time they’re willing to spend on the job site because they feel they’re not getting adequate reimbursement. “A contractor,” he pointed out, “can’t go back to the owner and say, ‘I’m sorry, I’ve exceeded my budget and can’t put any more time into your project.’”

Detailing a few of the problems caused by incomplete documents, Stella explained that his company subcontracts a majority of its work and relies on bids by subcontractors when putting together a package. “When subcontractors are not looking at the best set of documents, they make their own assumptions of how they envision the product going together. They bid it to us on those assumptions, and often they’re wrong. The architect doesn’t want to appreciate the position that we’re put in because of the business’s competitive nature. We realize how dependent we are on one another, we architects and contractors, but bad documents can erode the relationship.” Bad documents tend also to erode the quality of specifications writing, said Grant, because the details aren’t there.

Paring down costs and schedules undermines quality

Underlying such complaints is a deeper and more pervasive grievance that by chopping away at costs and schedules, owners have undermined

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overall quality. Take, again, the matter of specifications writing. Emanuel, who began his career as an architect, recalled that when he was a young designer, one of the partners in the architectural firm where he worked was a spec writer. Not anymore. Today, he said, word processing allows junior architects to produce specs by collaging together fragments from previous designs. Many of these young architects, moreover, having started their careers at a time when construction work was scarce, have little experience as spec writers, as Emanuel pointed out.

Whatever the reason, said Grant, when specs are unclear, the contractor will "go back to the architect and say, 'I'm going to build it this way,' and often the architect tells him no. So the contractor comes back with, 'This is not what I bid,' and then both of them have to go back to the owner." Paradoxically, the paring down of schedules and quality in an effort to achieve cost reductions often results in delays that inflate costs. It's a vicious cycle, and the ultimate loser, said Grant, is the owner. Emanuel pointed out that the problem is likely to worsen in coming years, as real estate investment trusts increasingly consolidate and once again become major clients. "The directors of these trusts," he said, tend to be "more bottom-line-driven than chairmen of major banks or businesses, so there's going to be even more pressure on the profession to produce in a timely way with less cost to the owner." That led Emanuel to the thorniest subject of all for architect-contractor relations. Called design delegation in the jargon of the design and building industries, the concept, according to the panels, has shaped recent revisions to AIA's flagship contract document, the General Conditions of the Contract for Construction, now designated A201; it describes the architect's role in administering construction and the rules for the industry. The revised A201 will carry new responsibilities for contractors for such subcomponents as HVAC systems and curtain walls. Little related the changes back to low architect fees. After doing work on a number of projects where the architect hasn't made any money, Little said, "he decides not only to spend less time but to shift the responsibility across the table." He added that the changes to A201 also represent a response by architects to threats by insurers to raise premiums or cancel coverage altogether as architects and owners increasingly sue for "errors and omissions."

Speaking for the American Institute of Architects, Dale Ellickson, the institute's counsel for the Contract Documents Program, said in a telephone conversation that rather than shifting design responsibility, the new A201 "clarifies things, makes things more explicit and gives two protections to contractors. One is that they don't have to do anything that isn't written in black and white. The other is that they don't have to do anything against the law." Nor do the 1997 revisions to A201 posit any changes in liability to the previous edition of 1987, according to Ellickson. He said the updated document is a response to the realities of a building industry in which an owner often saves money by relying on subcomponent specialists. That's not how the contractors viewed the matter.

Emanuel was the most vocal. Saying that his objections echo those of the General Building Contractors of New York State, which opposes the revisions, he stated that "there's no question in our minds that A201, as it is currently being published, will have an adverse impact on our relationship with architects." In fact, Emanuel characterized the proposed revision as "the hottest topic ever debated within the AGC," consuming hours of discussion time last September at the Associated General Contractors' midyear meeting in Albuquerque. A draft was approved at that meeting, said Emanuel, not because the membership liked it, but rather "because an enormous amount of work had gone into trying to get the best document, because it seemed to be the best we could get, and because supporters felt that not endorsing it would further alienate us from the architectural community in the future." Wolf objected to the way the AIA presented the changes to his industry: "We could nibble away at the draft but we were not part of the discussion process from the beginning." He also said, "If agreements are actually between the owners and the contractors, and the architect is off on the side, we question why the architect should draft the document—and be allowed to put in these provisions that are really quite onerous."

Shifting risk management

How onerous are they? "Here in New York State," said Emanuel, "the architectural community has identified 22 separate items that they're looking to design-delegate, including roofing." Design delegation, he said, is spreading from such things as curtain-wall and steel construction to "roofing and heating and ventilation systems, to everything."

In explaining what he believes will be the effect of the revised document, Little said that liability for errors and omissions made in the drawings—the risk management—is now completely shifted from the architect to the general contractor. Granted, he said, contractors will pass the risk down, for example, to the curtain-wall supplier, but because vendors tend to go in and out of business on a revolving-door basis, the real responsibility and risk will devolve to the contractor. Little also warned that if contractors are responsible for "the building standing up and doing what it's supposed to do," they will end up having to hire their own engineers and other professionals "who will be in competition with the architect." The real question, he concluded, is to define and achieve the optimal roles and relationships of owners, contractors, and architects. The best hope for smooth and productive relationships among the three players, he said, is a return to "professional standards rather than economics. Then we will have established what we should be doing today."

Not unexpectedly, architects' tendencies to delegate risk and responsibility to builders have strengthened contractors' and owners' growing preference for design-build construction-delivery systems. For contractors its advantages over a traditional design-bid process are obvious, since it includes builders from the start, gives them ultimate authority, and "allows them to avoid cost overruns and delays and everything else that goes along with the bidding process," said Wolf. For owners, he added, design-build provides one-stop shopping and "fits in
with their desire to lessen the role of the architect, who a lot of owners view as a necessary evil."

**A new twist**

An important twist recently has been added to design-build. Called design-build-complete, "it is where the industry's going to go," said Little. This is how it works: owners hire an architect to represent them throughout the process, but the architect actually carries out only the first 15 percent of the design. That puts designers in charge of those aspects of the process at which they excel, said Little, such as defining the program, figuring out space relations and adjacencies, configuring shapes, and outlining a seamless process. The owner then turns the process over to the contractor, while retaining the architect as an emissary.

"The idea," said Little, "is to get contractors in their role and architects in theirs, with each having the liabilities and responsibilities for their separate functions. Design-build-complete prevents the contractor from telling the architect, 'No, I'm sorry, we have to change this aspect of the design because we can't afford it.'" Some clients, Little asserted, are adopting Turner's preferred method in order to avoid court claims resulting from a newly popular, if dubious, practice among contractors. In describing it, Little said, "Contractors didn't use to look at a set of drawings and say, 'Well, there's a mistake here and here and here. I'll bid no fee, because I'm going to make twice my fee in claims for mistakes.' There are people who do that."

Another advantage of design-build-complete, said Little, is that it eliminates a major problem of design-build, namely that it lacks the checks and balances of the conventional architect-contractor relationship. Wolf explained, "Everyone at this table, if they're honest with themselves, would admit they've been in a situation where without the architect on the other side of the table, they might have been able to get away with something. In the design-build situation, the architect and the contractor are working together in a business relationship and—it's realistic—the architect is going to have a very hard time telling the contractor to put more money into the project. I think there's a very dark side for the architectural profession in design-build." In design-build-complete, on the other hand, said Little, the architect has to approve the drawings before the contractor can build. "And he has to approve specifications before we can complete. The owner's standards and checks and balances are protected much better than in just design-build," Little finished by asking, "Is the process perfect?" and promptly answering, "No."

Asked whether he sees design-build-complete as a trend, Robert Peck, commissioner of the General Services Administration's Public Buildings Service, said that he wishes to reserve judgment until the GSA's first experiment with the new project-delivery method, the Las Vegas Courthouse, is completed in about 18 months. In the abstract, however, Peck said, he finds the approach, which the GSA calls bridging, attractive, in part because it could allow emerging design firms, with limited document-production capabilities, to compete for major projects. Ed Feiner, the GSA's chief architect, added, "The GSA really likes to experiment and test everything, but the jury is still out."

**THE CONTRACTORS' MOST PERVERSIVE COMPLAINT WAS THAT DOCUMENTS FROM ARCHITECTS ARE NEITHER CLEAR NOR COMPREHENSIVELY handled on pricing, who has a consultant who can help guide the process. Stella said that in his part of the country design-build is not yet popular. "I think part of it is that architects want to keep the process to themselves. What they're not realizing is that they're being forced to give it up," Li added that an incentive for architects to accept design-build-complete that they usually earn a higher fee, at least when they work with his company. Emanuel noted, however, that many architects are market design-build as a way of expanding their services. "They see the trend, something they should lead, as a way to grab market share without re-examining what's involved. I think that's a disservice to the profession.

**New technologies are not up to speed**

New technologies are another source of change in the architect-contrac relationship. The electronic revolution has altered not only the way designers produce drawings but the manner in which they communicate with contractors. For a project in Singapore, for example, a San Francisco-based architect might have the documents produced in Mexico, the curtain wall designed in Malaysia, and the steel detailed in England. "I think the problem," said Little, "is that the information usually comes to the architect's company uncoordinated, because the motivation of the business manager in each of the far-flung offices is not to produce the best quality. The question is, how can you get this wonderful technology, high productivity, and low-cost work to a quality level where we can accept it?"

Computer-aided design has similar problems, explained Graeme Castille. "The CAD system has been wonderful for architects. But do they know how to build what they're drawing?" Amid much head shaking, answered, "Constructibility is one of the biggest problems I find. I do know if they have the experience of doing construction or really kn..."