



ROTATING HEADS

PRAGMATIC DESIGN

Q2: CONTEXTUAL AWARENESS





Rotating Heads

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DI's managing editor considers contexts and decision making for design professionals

A vital, vivid bit of advice comes to us from sports commentators and military advisors in times of heightened conflict:

“Keep your head on a swivel.”

This crude “coach speak” description seems the stuff of cliches or some B-movie man-machine hybrid cyborg creature. More sophisticated advisors might tell us we need:

“360-degree awareness.”

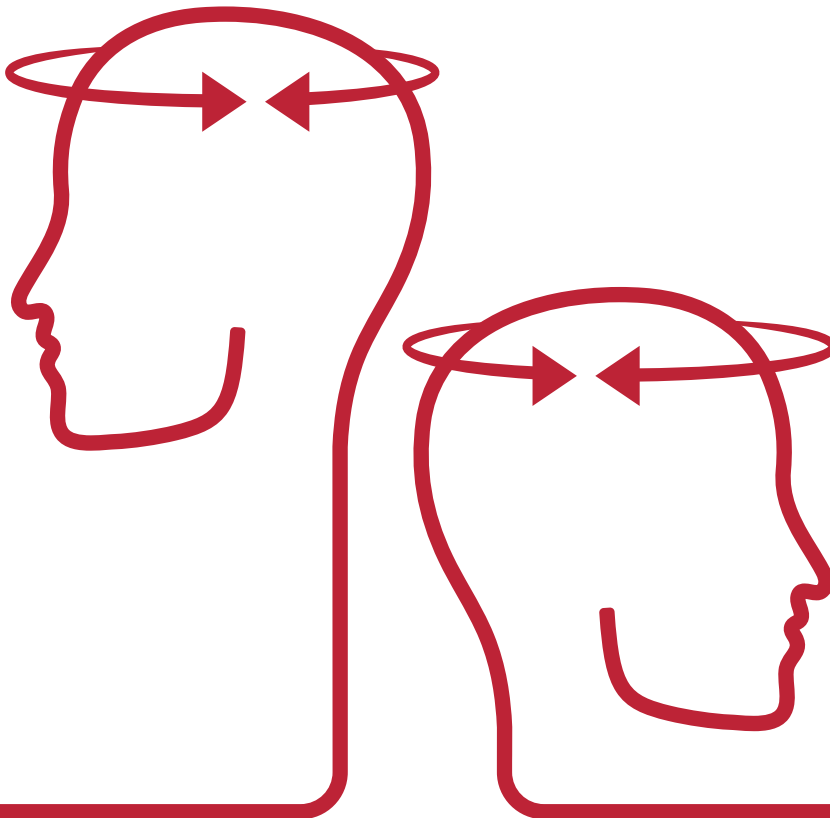
These kinds of admonitions might lead new entrants to the battlefields of sports, business and global survival – and even professionals in the built environment industry – to wonder:

Why the emphasis? Why now?

The answer is simple: We are now connected in ways we never have been before. To exist, survive, and effect positive change we must be ever vigilant and sensitive to our surroundings, and we need new modes of decision-making to accommodate our many contexts and connections. Since information is coming at us from all directions, we need to constantly look for it and decide which to use.

CONNECTIONS

While native peoples, Eastern philosophers, and leading thinkers of the western world have long known the importance of existing in harmony – man with nature; all races with all others; one tribe with the next; and current generations with those of the future, we denizens of the western world are late to the party. Myopically shaped by our limited U.S. world view of always-abundant resources, constant growth and a historical position atop the geopolitical pecking order has created a monster: multiple generations of Americans who have grown up in a reality distortion field – a world in which upper tier incomes are expected, and those unlike us are shunned. A too-



narrow context in which to design. Things have changed. We now are concurrently burdened and liberated by an endless, expansive set of realms in which to live, work and play. It's not about "us" anymore. It never was. Here are just a few of the ways we are connected these days:

- Our food supply is part of a global supply network. While food waste in developed countries grows, millions starve in third world nations.
- Our built environment uses scarce resources irresponsibly and consumes 40% of the planet's embodied energy. Carbon emissions continue to grow.
- Our information and communication systems have now evolved in ways that exceed our ability as humans to use and understand them. Their very existence is changing us in unimaginable ways: shorter, shallower attention spans; attention deficit disorders; media addiction.
- Our social and human systems now grant us access to races, creeds, genders and agendas that span the globe. Each of these sub-contexts has the potential to connect or divide us.
- A plethora of concurrent crises have become the norm, all affected by the solutions we design and build. These include global pandemics and public physical and mental health challenges, economic recessions and supply network shortages, and political mis- and dis-information campaigns.

While this set of connected systemic wicked problems is becoming well understood, what is less well understood is how to deal with them all. Let's explore that.

CONSIDERATIONS AND CAPABILITIES. PERSPECTIVES AND SCALES

As designers, we are proud of our broader perspective. We are skilled at seeing things in many perspectives and scales. We learned to take these views in school, in limited ways. "Consider the urban scale", we were told. "Walk the site, analyze it, even engage the community" many of us educated in the 70's and beyond were counseled. Design masters such as Frank Lloyd Wright worked at a multitude of scales and contexts ranging from site design to integral organic architecture, systems and structure, all the way to designing furniture and tableware for his pioneering creations. The fact that much of his furniture was angular, uncomfortable and unsuitable for its purpose is a story for another day. But give him credit – or criticize him – for at least caring (or perhaps indulging his inflated ego)



That's what we do, isn't it? It's our job as design professionals. We make decisions. Deal with it."



and trying to control a larger sphere of influence in his work. Beyond a merely-reactionary solution to a design opportunity, in his own paradoxical ways, Wright was early practitioner of expanding and re-shaping contexts – changing them to suit his singular visions. While remarkable, his efforts were not always successful. What can we learn? Perhaps that a more multi-valent outlook would serve us better.

EXCUSES AND DECISIONS

In our hyper-connected world – a place in which anything and everything we do can affect everyone and everything, we can no longer afford the luxury of our former excuses:

"I'm just one person."

"I just do buildings."

"That's not my job. I'm not paid to think about that."

"If I don't do it, someone else will."

"There are too many decisions. I can't cope."

"I can't take responsibility for the effects of my actions on buildings/systems/people/environments/societies [insert context here] downstream."

As a result, the responsibilities for deciding what to do, how to do it and who to do it for have become almost overwhelming.

As an architectural student at the University of Michigan in the 1970's, I once lamented my plight in the then-assigned design studio problem to professor Colin Clipson. "I'm struggling", I

confided. “Working through so many options. Trying to make some decisions to narrow the exploration.”

He smiled. “That’s what we do, isn’t it?” he reminded me with empathy, but not sympathy. “It’s our job as design professionals. We make decisions. Deal with it.” The implications, in his groundbreaking design methods course, were: not only did I need to get my attitude right, but I needed to develop some kind of rigor and process for making the countless, thousands and millions of decisions that would confront me over the course of the rest of my life as an architect. Clipson was right. He helped me understand and cope with the magnitude and nature of our jobs as designers – to decide, and to help others do so. How do we go about this? Only by deciding what not to do can we decide what we will do.

Faced with such a multitude of contexts, consider the designer’s plight. At every turn, it’s a head-spinning paradox: do we include more information or decide now? Explore more options or make the call?

Regardless of our choice, each time we must make the decision with care, evaluate the factors and risks, assess the obstacles and opportunities, and then - using education, experience, judgment and wisdom - make our best guess. It’s what we do. In these instances, no one knows for sure, but leaders must decide. Or do they? Sometimes it’s better to leave the options open and defer the choice until the priorities clarify themselves.

In this respect, the designer’s mindset is a bit like a scene from last year’s *Top Gun: Maverick* film remake. The flight teams meet for a day of sun, fun and games – sun bronzed bodies and team bonding over beach football. But to make it more lifelike, (or in-flight combat like in their case) they play with a surprise



new rule: there are two footballs. Teams must play offense and defense at the same time. Where to focus? That's the question. Contextual awareness indeed.

In her new book, *The Light We Carry*, to help us cope with so many possible inputs, Michelle Obama counsels us to tap into “the power of going small” by absorbing ourselves in the detail, focusing and giving our attention to who or what we're doing at that moment. It's an existential thing, a positive habit espoused by leading thinkers such as Albert Camus and other advocates of “being present.” Obama reminds us that “jeopardy is woven into the human experience... we must learn how to face anxiety and uncertainty, and how to be ‘comfortably afraid’... There's a middle zone, a place where we can operate without fear, awake and aware, but not held back... [a place where we] stay balanced and think clearly in its presence.” To support this contention, Mihaly Csikszentmihalyi, the noted psychologist and author of *Flow*, characterizes this zone as the place where we migrate between boredom and anxiety.

As designers, we do this for a living. We embrace contexts, uncertainties and decisions, knowing all the while that each choice we make closes some doors yet opens paths for others - with associated impacts for the future occupants of our buildings. We test and go beyond the edges of our comfort zones. That's how we face fear. That's our courage. While mere mortals would be rendered catatonic faced with so many weighty decisions, we designers dispatch them with aplomb. But it ain't easy.

The best of us can transcend mere mindfulness and reach awareness - a conscious heightened state. It's what we pay attention to that enlightens us - and enriches our work. In his book, *Turning the Mind Into an Ally*, Sakyong Mipham calls upon meditative and contemplative principles as he tells us to “disempower bewilderment by recognizing and releasing thoughts and emotions...” and deploy “discipline to adopt a wide-angle, long term perspective.” As Mipham explains, our mission is “learning to decide what to accept and what to reject,”

and to imagine, “What are the actions? What are the results?” It begins with “the basic attitude of enlarging our motivation to include the welfare of others.”

Our duty is to discursively wrestle with each of these many factors, contexts and constituents and ensure they’ve been “seen”, “heard” or considered. Then, based on the many things we’ve seen, heard and considered, our task is to process them by slicing dicing and analyzing them and casting some aside into the compost heap. Finally, we place a select few criteria in our human, professional “crockpots” to produce “design stew.” Some of us use a slow cooker. Some of us pop our decisions into microwave ovens. Some of us have even mastered the art of accommodating many cooks in our kitchens. No matter our approach, each of us is expected to produce rational, poetic, economical works of architecture out of kitchens that often lack the proper ingredients - or have too many - and lack the time to cook them. But we cook, nonetheless.

To continue the cooking analogy, in *The Light We Carry*, Mrs. Obama goes on to share another of her powerful tools, her “kitchen table”, or network of close friends and advisors from which she draws support, criticism, and broadens her views - an added, self-selected context of trusted advisors. Another First Lady, Hilary Clinton, invoked a related notion when she suggested, “It takes a village to raise a child”. What she was talking about was the need for a broader context and broader network. More perspectives. While I greatly value the brotherhood and advice gleaned from my male friends and role models over the years, I’m experienced enough to know two smart women when I see them, and not too proud to heed their advice.

CONTEXTS AND MEANINGS

Consideration of surrounding forces now creates a multiverse of contexts for designers and builders to wrestle with. Each carries its own set of meanings, relationships and values. Here are just a few designers are familiar with:

Site. Are we treading lightly enough? What might our building relate to? What should it? Are we part of the urban fabric, or will we contrast it as an iconic self-aggrandized monument?

Community. Do they get a say in what happens? Who decides? Those with money?

Climate. How do the local natural forces shape the building. Can we or should ignore or overcome them via of more mechanical systems and energy? If the building or its enterprise is profitable, does it matter? Or do the collective use scarce resources such as water and energy owe consideration to the global stock?

History. How does our design solution we acknowledge the past?

Social. Is our building a place where an elite few are allowed access? Or can it be a shared resource for the community it will become a part of? Who decides?

Economic. Can we throw off the tyranny of foolish first-cost-based budgets in favor of long term total cost-benefit analysis?

Markets. Do buildings serve or exist within markets? Which ones?

Aesthetic. Does our building reflect, respect or reject its surroundings?

DESIDERATA

With so many frames of reference, how do we know where we are? How do we relate? How do we decide what to value and how assign weights to these oft-competing interests. The most sustainable solution might be to not design or build a new facility. Is there an existing one we can reuse? Are we willing to walk away from a commission or lose our job over the priorities we set and contexts we respect? Tough questions to be sure.

PRAGMATISM AND PRIORITIES

DI's annual theme of pragmatic design steers us to issues relating to matters of fact, practical affairs more than with what could or should be, often to the exclusion of intellectual or artistic matters. In this pursuit we are practical as opposed to idealistic. We deal in the realm of results and consequences. Due to our learned economic value systems, there is a tendency to want to work on highly elastic problems - those yielding results with low additional units of input or effort. But those may not always be the right factors to go after. Judgment and experience can help. So can casting a wider net for our teammates.

RANGE: SPECIALISTS, MISFITS, GENERALISTS AND STEREOTYPES

In a world more technical and complex than ever, few of us possess all the necessary skills to do everything that needs to be done. In his book *Range: Why Generalists Triumph in a Specialized World*, author David Epstein extols the value of connective people. Despite the clear, growing need for experts and specialists, we still need connectors, translators and

enablers. Too often, Epstein observes, due to specialization, we are “working concurrently in a series of parallel trenches.”

For as long ago as the Bauhaus's century-old movement toward the integration of arts, trades and machine production with craftsmanship, designers and makers have increasingly required more detailed knowledge about technical matters. Hence the growing demand for technical experts in the AEC industry, and the commensurate need for those who bring these “parallel trenching” specialists together to create “*gesamkunstwerks*,” or, total works of art, as Gropius and his Bauhaus group called them. Filling these varied roles gives rise to the need for “misfits.”



In a human-centered approach, not only does the research need to reflect the target, the team does, too

- Ella Hazard



In her courageous 4th quarter 2022 essay in DesignIntelligence Quarterly entitled The Case For Misfits, Ella Hazard, executive director of Arktura Ventures (an Armstrong company) shared her hypotheses:

“In a human-centered approach, not only does the research need to reflect the target, the team does, too.”

Ella Hazard’s call for diversity rings true. Here’s the question: who among us isn’t a misfit? Are we not all different or flawed in some ways? For example, we desperately need the IT experts. In our former, non-PC days, we lovingly called them nerds, geeks, dweebs, and propeller heads. We stereotyped them as hoodie-and-sandal wearing, tattoo-bearing, Red Bull-drinking introverted youngsters. While we saw them as miscast outsiders, we allowed them within our homogenous corporate cultures because we needed them. They were the magic wizards that kept our computers and networks humming – the very systems that held the power to make us smarter and more efficient. Now these former misfit stereotypes have not only become acceptable in corporate America, they’ve re-shaped it. Yes, we are all misfits.

DIFFERENCES

In her new book, Michelle Obama reminds us of the opportunities within our reach. Paraphrasing, she frames the opportunity thus:

Our differences are our stories. They make us who we are. Whenever we can broaden the definition of being, we open the doors for more of us.

As humans and designers, expanding our range in this way just makes sense. In a world with so many contexts to consider, why wouldn’t we want to have a bigger, better team to cope with them all?

A perennial challenge is to sort through the many contexts we are laboring in and using our peak levels of contextual awareness attune our thinking and emotions to the prevailing vibe. Do the differences we observe deserve to be recognized and celebrated, or in this context, suppressed? Nothing is worse than design teams who force their dogmas and biases on unsuspecting constituents because they are out of touch or tone deaf to what’s important. Empathy, a key action verb in contextual awareness, is required.



NOISE AND SIGNAL

In a logical, engineering sense, contextual awareness can be thought of in information theory terms as trying to extract or discern a “signal” out a sea of “noise.” But how do we decide what is noise and what is valuable information? Simple. We apply value judgments and apply conventions that build over time. In a parallel to gardening, how do we decide what is a weed and what is a beautiful, prized flower? We simply agree to value one more than the other. Both grow and are prevalent, but only one, we decide, will be retained. The other? We pull it, poison it with toxic chemicals, or let it be and curse it’s existence. So too, with design inputs.

INTERPRETING INPUTS

An interesting thing happens as we try to interpret inputs. The stimuli we process rely on many contexts, past, present and future. What was said or done before has an impact. More difficult, what these influences might mean in the future has low certainty. Just ask the designers of the infamous Pruitt-Igoe housing complex in St. Louis. Fueled by hubristic modernist dogma in 1954, architect Minoru Yamasaki interpreted the context as needing his stark solution of 33, eleven-story high-rise towers to clean up the area’s urban blight. Decades later in the 1970’s, after seeing the social horrors, crime, vandalism, juvenile delinquency and bleak outcomes their designs had wrought, the project was demolished - a landmark example of contextual ignorance, an abject failure.

As with flowers and weeds - and urban renewal - it seems that meaning and value are in the eye of the beholder, and these meanings can - and do - change drastically over time.

COMMUNICATION ICEBERGS

The phenomenon of how a design team can so dreadfully misread their context can be understood through the concept of a “communication iceberg”. In their 2022 book, *The Language Game: How Improvisation Created Language and Changed the World*, Morten Christiansen and Nick Chater, use the term to suggest, as in an iceberg, the visible tip above water may contain the overt words, phrases and sentences we believe convey meaning, but which pale in comparison to the larger hidden parts - the customs, norms, empathy and culture below the surface that ground these words and imbue them with deep meaning. Context readers beware: Look below the surface. Dive deep. Ask and listen to understand. As another caution, those of us who interpret contexts for a living must be acutely aware of the power of our biases and tendencies to chunk and oversimplify data. While necessary for survival in an information-rich world, these skills can be harmful when misdirected.

CONVERSATIONS, GAMES AND DANCES

Beyond mere awareness, it’s our absorption and reactions to the inputs that matter. Understanding of any context requires not just immersion, but an active two-way collaboration and conversation, one in which the unspoken aspects may be just as important as the surface data. Communication is an interaction or “game” in which the parties must try to read one another’s minds to understand the context. Like the game of charades, the unspoken is key and data compression is essential, as is the creativity and inventiveness of the players.

In such “games”, not unlike improv’s classic “yes, and” rule, participants must accept and build upon one another’s words, beliefs and data - until disproven. This “takes-two-to-tango dance” is a far cry from a singular expert who single-handedly decides which information to keep and which to dispose of. Just like language’s essential self-organizing forces, each judgment and interpretation is an individual decision shaped by shared experience. These skills transcend awareness.

“KEEP YOUR HEAD ON A SWIVEL”

Is the “head-on-a-swivel” metaphor a useful device? Comical or emblematic? A sign of bewilderment for a profession spun in circles and dizzied by so many decisions and contexts? Or is it a helpful positive reminder -- the “new normal” for responsible design professionals: our need to constantly survey the premises and look beyond the horizon to assimilate and react to the many contexts that surround us?

As we continue our connected pursuit of design solutions amid myriad contexts, let’s remember this: We are all misfits. We are all connected. And we operate in many settings. To get through it, we’ll need to come together and be more aware of where we are in the world and how we should relate to these forces. And we’ll need to get smarter and better at looking in all directions and using systems thinking and rigorous decision making to respond to what we see.

Let’s keep looking. Swivel-heads unite!



We are now connected in ways we never have been before. To exist, survive, and effect positive change we must be ever vigilant and sensitive to our surroundings, and we need new modes of decision-making to accommodate our many contexts and connections



Michael LeFevre, FAIA emeritus, is managing editor of DesignIntelligence Media Publications, principal, DesignIntelligence Strategic Advisory and author of Managing Design (Wiley 2019), an Amazon #1 selling new release.