A 30-MINUTE CONVERSATION with Ace Torre, FASLA, can be exhausting. The 61-year-old designer leaps with boyish enthusiasm from worldwide conservation issues to French philosophy to the intricate details of a building roof. But at some point, words aren’t enough to communicate the complexities of his ideas. Then, he draws.

Drawing is a common thread that knits together Torre’s way of seeing, thinking, and practicing across several complex areas of endeavor. He is a registered landscape architect, an architect, an interior designer, and a city planner who has distinguished himself as one of the foremost designers of modern zoos in the United States, and he has a broad portfolio of award-winning parks, waterfronts, and urban revitalizations as well. He is a gifted musician who once pursued a career in rock and roll, as well as an author who paints, sculpts, and designs furniture (and his own residence) for good measure.

How did the one-time New Orleans keyboardist become fluent in such a range of creative disciplines? “I love to draw,” he says.

Torre began his career as the founder of the urban design department within the New Orleans Planning Commission, bringing design thinking and his gift of drawing to the political agency’s vision of the city. After leaving government to study in Italy as a Rome Prize recipient, he worked as a designer in architectural production firms and eventually became a partner in a landscape architectural practice that after years of evolution and a buyout exists today as Torre Design Consortium.

Along the way he invented his own unique approach to design drawing, which he termed “the tilt-up technique.” In his 1986 book Site Perspectives, he describes it as “a free-form combination of aerial, axonometric, isometric, and one-point perspective” that lays back building walls and site elements to expose all for design study. These epic drawings are
quickly constructed to scale on trace over the rough plan view, and they allow design exploration of landscape, plantings, architectural facades, and spatial relationships simultaneously. It’s a particularly potent tool for the many complex facets of zoo design, especially when the designer is thinking concurrently in the capacities of architect, landscape architect, and interior designer.

For any given project, Torre’s tilt-up view is supplemented with a staggering number of loose, freehand cross sections and perspectives that, through many overlays and refinements, fix the details and character of the vision. Many of these loose drawings find their way into the digital construction documents, allowing contractors to closely see his design intent.

After visiting Torre’s office in a former historic schoolhouse on Magazine Street in New Orleans, I became anxious to share Torre’s unique approach to drawing and practice with a new generation of designers. So I sat down for a charming series of conversations over two days in February.

J.R.: There are a ton of drawings in here!
TORRE: We’ve done 35 zoo projects. I have probably 5,000 sketches. Some are loose, some are refined. Some big, some small.
J.R.: Freehand drawing is a big part of your working style and your firm’s identity. That’s increasingly rare even in design offices. Why do you draw?
TORRE: Because I love to draw. It’s a vehicle that allows exploration. If you can’t draw it and see it, it’s impossible to think it through. And if your intent is to work on a project that requires other people to understand your vision and you can’t draw it so that they understand it, it’s impossible to go further into refinement. So it’s a powerful tool, but it’s only a tool if you like to draw. A lot of people are intimidated by starting. They expect a masterpiece when they start out. A lot of the drawings 1 do are good. But the exercise that I went through to create them, to think about them, and to discard them is still a positive process in arriving at the ultimate design solution. And there’s a continuum in this office that if the idea is strong enough, it goes through another iteration and another iteration and eventually finds its way into the final electronic production set as a freehand drawing.

You know, at the turn of the century, the educated man had to be able to draw. If you couldn’t draw, you weren’t truly considered an educated man. Nowadays, those of us who like to draw, draw. A lot of people look at it as tedious, and they only use it when they have to—you know, you do a plan and you have to do the obligatory two sketches. Then the value isn’t much because you’ve already set everything in position. But in our case it’s an iterative process back and forth, using drawing as a tool to explore rather than to justify or clarify what you already did. I think that’s a big difference.

Torre created his first tilt-up drawing, above, out of a need to explore the complex urban relationships of New Orleans’s St. Charles Street in three dimensions. The approach won a major competition for the design commission. Torre explains and re-creates the thought process of multiple vanishing lines for the St. Charles Street sketch, left. His initial sketch, below left, tries to capture the “feel” of the project. As the sketch evolves, below right, ideas for architecture, theme, branding, and distant landmarks are explored.

J.R.: You’re probably the most prolific sketcher I know in any discipline. Is sheer volume of drawings part of how you work through the creative process?
TORRE: I believe more is better. I have to do that volume to really see what it looks like and then show people what I’m trying to create so that they can react and modify it. So the volume is a result of the process.

I also believe that more is more accurate and informative. You can see the rocks and crannies and twists and turns of a design if
you draw your way through it. If you do a plan and then you do the requisite il-
nuonaries, you probably pick them based on what you think the key points are. But
you know, there may be 1,000 important points that constitute the overall ex-
perience. Then 50 sketches is going to be bet-
ter than three, right?
J.R.: Well, when your contract calls for
two drawings and you’re doing 50, obvi-
ously speed is a factor. So how do you
learn to work fast?
TORRE: The way I do things came to me
by being a student at Louisiana State Uni-
versity (LSU) while playing music as a pro-
fessional four or five nights a week in New
Orleans. I didn’t have a lot of time to ponder,
you know? So you had what you had and you
learned your way, you learned by ear, and you
got a lot of it just by playing and playing mus-
ics, went back to school and early you at-
tacked the drawing. While people were
still making progress. As long as that sheet’s
blank, you’ve done nothing.
And I believe that great French adage
that “your first idea is probably your worst.”
If you can get it right the first time, or get it
right enough as in there are no mistakes, black-
and-white solutions to any design problem,
and if you feel good about it once it’s execu-
ted, did you really need six weeks to work on
it, or could you have done it in three days?
And I do like the intensity of just jumping
it through. So for better or worse, it’s the way
that I do it. It’s what allows a relative-
ly small firm to do what other firms need
a lot more people to do. I find it’s really
a great solution.
J.R.: When do you first remember drawing?
TORRE: When I was in grammar school. A
bunch of me and I got out of a lot of clas-
work by doing murals (laughs). I re-
member I did a panel of Egyptian tem-
plies with Pharaoh’s army riding horses.
They filled the whole wall—be it on this
side and I’d be on the other, we’d dis-
cuss a little, and we’d work to the center.
In high school I got into drawing auto-
mobiles so that the racing slick looked
like black rubber, and the chrome had the
right reflection. But when I got to LSU, I
was looking for books because I didn’t
understand the drawing vocabulary for
landscapes. So I tried to invent my own
vocabulary and wasted a lot of time.
J.R.: Was there an “aha” moment when
you “got it,” or was it more a matter of de-
veloping the skills and drawing vocabula-
ry over time?
TORRE: It was when my professor Max
Corral, JADA, brought me Ted Kautsky’s
Pen and Ink book. I probably spent a
month duplicating every drawing just to
see what it would feel like. Eventually
learned that there were these things used
as a vocabulary that when assembled created
a great sketch that looked like a landscape
architectural drawing. And once I got the
hang of it, I really loved that approach.
When I used to teach drawing, I’d make
the students trace for the first month. Pick
a picture and trace it and when you can
physically feel the hand strokes and what
it takes to create it. That exercise pushes it
backward into your brain, and as a result
you have a base vocabulary to make things
happen. You know, when you play the pi-
ano there’s certain feel to the keys. It’s the
same process in drawing. If you can get on the
vocabulary and physically understand what
it takes to make these marks and icons that
when unrolled create a sketch, you can
much faster absorb it than if you were try-
ing to invent your own vocabulary. You can
kill yourself that way. It would be like try-
ing to invent your own language every
time you meet somebody. You’d wear your
self out and probably wouldn’t understand it
and you’d never make any progress.
J.R.: How did you develop the tile-up
method?
TORRE: Like everything else, out of neces-
ity. It came out of the St. Charles Street de-
sign competition. I had it out in plan view,
and it was all square building footprints and
rectangular streets and circles that were go-
ing to be trees. I looked at it and said, “I
don’t even know what this is going to look
like.” So I envisioned it in perspective as a
whole street scene, but rather than every-
thing coming to a single point I took a
Penelli and taped it to a yardstick and cre-
ated multiple points, laying the buildings
and facades back. Since it was down scaled, I
saw for the first time that these blocks were
not only the first small historic buildings. And
the other blocks were larger, more urban scale
downtown buildings, and soon four zones and a radic-
ally new element to tie them together start
to evolve just based on peeling these fac-
cades back.
At the time I just did it and then thought
about it later. Sometimes you use your
intuitive sense and just do it, and if you’re pleased with it, you go back and think about it and figure out what worked.
Then it’s a tool.
J.R.: It seems to work particularly well in
neo-design. You’ve got so many issues that
you’re trying to think through, starting
with values and the conservation message,
deciding how to translate that into a vis-
er experience, then translating that experi-
ence into form…
TORRE: We always start with the fact that
design is about things and how the earth is connected.
So how do you tell stories that help people understand why critters have spots or snakes or why they’re big or small, slimy or not? It’s usually based on the complexity of a globe that has differential heating because it’s a sphere that has wind patterns that cre-
ate vegetative habitat but contain geometric
issues. It’s hard to tell a story without get-
ting into the whole and why it’s like it is.
Our concept for the Northwest Passage
at the Memphis Zoo began with a scribble of
what the journey would be like. And from there it were indications that are visualizing how it works, and I did a whole
slew of sketches. The cool thing is that it’s
not only geographically, but in
time. You know, the last bridge of
the Ice Age was 10,000 years ago. That bridge
led critters to come to North America, peo-
ple followed and then led to the cre-
ation of different nations of people as
groups. So this is much about the histo-
ry of the United States as it is about the ani-
imals. An ice age befalls us, patterns change,
population move, and a whole new nation is
born. Then comes this genius, Chief Seattle,
who tells Congress in 1854 that man didn’t
touch the web of life, he’s merely stirred in
it, and what he does to the web he does to
himself. He moves on, and we won’t pick
up that idea again for 120 years.
So you go through the exhibit, you’re
tually moving across the land bridge and
across time through 3,000 or 4,000 years
of change that leads to at least four cultur-
al entities. Journeys like this link different
forms of vegetation, different critters, dif-
ferent things, different ecological interrela-
tionships. Our work takes the vis-
ions and puts them there. Not just look-
around, but to show them a sequence of
events that explains why things are the
way they are. And it’s really a great ex-
hibit, in the sense you remove scents.
J.R.: Tell me about the role of drawing in
your personal creative process.
TORRE: I work with a lot of groups. So I’m
sitting with 10 people, and there’s a blank
sheet. They don’t know what it’s going to
be. I don’t know what it’s going to be. At
that point you have ideas. And what’s re-
ally different about what we do rather than
what engineers, attorneys, and other people
can do it, is that we do it as a collective ex-
perience. Even just running a cross section
and drawing your little scale person, showing
where the right line is— that’s just magis-
ical. It also helps them see what direction
you’re moving in. So it’s a great tool. And
the reality is, I can’t see it until I draw it.
J.R.: You don’t see it finished in your mind
first?
TORRE: No, there might be some kind of a
corner or thought process there, but it’s
anything if we or you do not have to draw it,
and then you have to draw it to scale. Look
at those wonderful drawings by Leonardo
da Vinci—the way he takes something and
cuts it apart and then analyzes it and
joins it up and explores how it looks onto
another gimn. It’s just great! But he had
to draw it to understand it and to dem-
strate what he’s thinking to somebody else.
The other thing that I really love about
drawing is when something evolves that
you didn’t think was going to happen. You
had no idea. It’s like a real thrill. You
explore this, that, and that, and eventually
comes, you didn’t anticipate. That’s
what everybody's looking for—that's the magic of discovery.

TORRE: As an evolution. Doing that stuff on the computer early on takes more time to set it up and get it going. Of course once you have it set up, you're on your way. But at the schematic level, you're at your loosest, most amorphous experient. It's part of the search. So we do all the initial explorations in freehand. Even the plan is done in freehand with the spot grades. Once we've got the first iteration approved and we think we have a good thing going, then we actually transition to electronic production. I do miss that our office doesn't look like a design office anymore, it looks like an insurance company with a bunch of people sitting at computers. I loved it when there were big drawing tables and drawings hanging off the side.

Having determined the most advantageous angle from which to construct the 3-D-up drawing, Torre overlays the plan view with trace and draws the control “vanishing line” perpendicular to the bottom of the sheet. This line’s placement is important as the viewer’s eye will be drawn to this part of the finished sketch. Torre uses “vanishing lines” drawn from vertical edges of important plan features toward an imaginary vanishing point off the bottom of the sheet. Lines are adjusted slightly from true perspective as needed to allow for the most informative view of vertical features.

I find it very interesting that there are a lot of programs to make electronic drawings look like hand drawings. In the old days, hand style, line weight, the way you articulated the line you draw—if somebody had talent, the drawings were good. If they didn’t, they were bad. With electronic production, drawings are good, period. So you have to look further to see what’s inside the drawing, because they can be incorrect or misleading. Even with an electronic trace you can have scale problems because people don’t understand the concept of the horizontal line. It’s easy but I see electronic mock-ups that are all wrong, it’s a matter of not understanding how perspective works.

I.R.: Do you do all the hand drawings?

TORRE: I do all the illustrative design drawing. As we refine the project, my staff will do important hand drawings to discuss prior to producing them electronically. Speed is a factor as well. I can blurt through a concept pretty quickly and do a whole lot of drawings where someone else might just be getting started; otherwise we’d have to have more people. So we run a pretty efficient machine based on this iterative process we’ve developed.

I.R.: Your drawings and your built work have a robust feel to them. Does your drawing style influence the design, or does your vision of the finished design dictate the drawing style?

TORRE: Neither. But I guess if it’s working like it should, the way the first drawing feels is how the built project ends up feeling. Maybe it won’t look exactly like this, but it should feel like this. I think that’s what you’re going for.

The 3-D-up takes shape as more elements are extended vertically, using the “vanishing lines” as guides. Rough perspective studies are used as a design tool for the working drawing. A refined 3-D-up concept for the hedge planting, based on a quick eye-level perspective sketch study, is taped into place. With all revisions in place, a final overall drawing is chased, then chased, then chased, then chased. After the final meeting is chased, the complete 3-D-up is printed and color is applied. Shadows for trees, buildings, and other vertical elements are key to creating a convincing 3-D effect. Torre draws shadows horizontally, parallel to the bottom of the sheet. A close-up view of the entry complex reveals details of both plan view features and vertical elements, including architectural elements. A subtle green grid indicates acreage. Each square represents an average area of $4 to $5 million in investment, providing designer and client with a visual budgetary tool for discussion.

I.R.: I’ve written about the speed advantages of working very small. You, on the other hand, work very large.

TORRE: I think it takes the same amount of time to draw a large drawing. You do have more real estate to cover, but you’re moving quickly, and you’re not afraid to just blur through it, and you’re working with a pen like a club rather than in a refined position, it’s a great way to work. Large size is also good for drawing with the client. If you want to have somebody be part of the process, put the tracing up and draw it with them there. Maybe they can’t draw, but they feel they’re really influencing the design because they’re there while it’s actually being shaped. It has a whole different impact than if you showed up with a big stick presentation and you’re asking them to sign off on it as the best thing since sliced bread.

I.R.: You’ve said that a tremendous
amount of design personality could be developed through drawing skills.

TORRE: If you look at a lot of drawings, you can see or maybe feel the personality of the person who did it—the way they texture it, the lack of texture, the freedom of the strokes—so whether somebody’s tightly wound or a free spirit, they portray their personality in their hand. Now it’s different in the electronic age because that’s an aggregate of different attributes that you locate from different places and assemble. So it can hide whether you are loose as a goose or tight as a clock. But in hand drawings, you can see personality. I enjoy that; it’s something I like to see.

J.R.: What would you say is the value of drawing to landscape architects—today and in the future?

TORRE: Delineation of concept. There’s a very human quality there. When you look back at great renderings from da Vinci on, you’re looking into that guy’s brain. You can see how he made those strokes, how he crossed something out or corrected and modified it. Back in the kitchen we have a drawing that’s a cross section of Brunelleschi’s Duomo in Florence. That’s a contract document. He’s got little notes on it, making calculations and then scratching out. That’s the drawing that built the biggest dome that mankind had ever seen. And that was his drawing, in his own hand.

I think anybody can be taught to draw with a level of proficiency. But if you’re at the proficient level only and you hate doing it, you’re not going to embrace it like you really enjoyed it or really believed in its power as a tool. And if you don’t feel comfortable with drawing it, how can you figure it out?

Romantically I want hand drawing to stay. Pragmatically I don’t know how it can be replaced. I find it hard to imagine. But I believe that in the future there will be more people who want to draw, because it’s more valuable than it’s ever been before.

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