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WATER SHAPES

Design • Engineering • Construction

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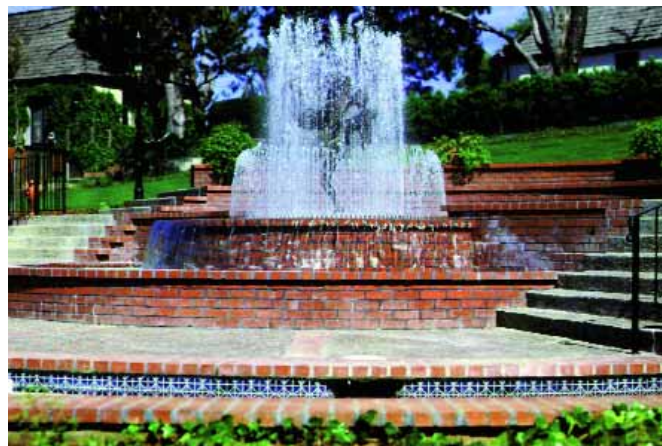
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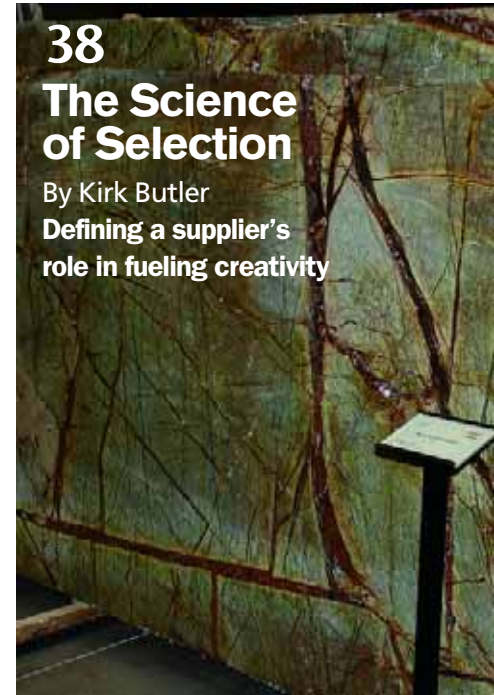


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February

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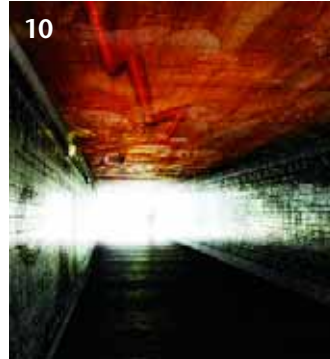


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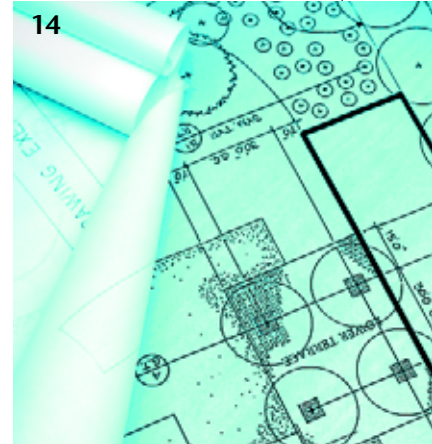
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On the cover:

Photo by David Tisherman, David Tisherman's Visuals, Manhattan Beach, Calif.

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Clear Choices

Among all of the many projects we've published in *WaterShapes*, a few have stood out as being extraordinary because of the artful ways they combine glass with water. In capable hands, the properties of solid and liquid combine to make statements about both materials that are constantly intriguing and frequently mesmerizing.

In this issue, you'll find a fresh example of this combination in "Sailing Grace," an article by Michael Batchelor and Andrey Berezowsky of Montreal's SWON Design (see page 32). They were called on to provide a sculpture for the corporate headquarters of a giant technology company and came up with a cluster of dramatic sails made of slumped and textured glass set amid a highly reflective architectural pond – a stunning composition that plays with the transparency and visual fluidity of both materials.

I single out this feature because of the way it resonates with one we published in October 2008 – "Winds of Life" by John Gilbert Luebtow (page 56). That project also features a string of slumped-glass panels, this one positioned on a large corporate plaza in Los Angeles. In comparing the two works, and indeed in examining the assembled works of these artists, you'll see differences in approach, style and tone – but also some substantial similarities in aesthetic sensibilities, design strategies and scale.

In working with Batchelor and Berezowsky as well as with Luebtow (all of whom have contributed articles to *WaterShapes* in the past), I asked each of them if they were familiar with the other's work, given that they make exquisite use of glass and water and seem at least superficially to be doing it in somewhat similar ways. All reported not having seen the other's work.

What I find fascinating in their synchronicity – that is, in their separate development of similar design solutions – is that these fine artists most likely arrived on common ground because of their choice of glass and water as media. It really surfaces when you hear them use the same terms to describe their work and how they revel in the way glass distorts views, transmits light, works in concert with the reflective qualities of water and can be used to engage nearby architecture.

It must be noted that these artists are fiercely independent and committed to blazing new creative trails, yet it's clear that the physical nature and constraints of the materials they've chosen have led them to tap into similar (yet distinctive) sets of creative impulses.

Casting out a bit to make a broader point, it seems to me that many of the materials most frequently wielded by watershapers – glass, stone, plants, concrete, metal, wood and tile – lead designers and builders who harness their aesthetic potentials to work along all sorts of similar lines. The key to individuality (that is, the genius of distinguishing your work from anyone else's) has to do with your success in evaluating those materials in light of a specific site and a specific client and using them to provoke specific human emotions and past associations in ways that produce delight and inspiration.

Batchelor and Berezowsky succeed magnificently on that score, as does Luebtow.

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Bruce Hughes spent 17 years in the pool industry as president and partner for DeMar Baron Pool Plastering (San Bernardino, Calif.), during which time the company plastered or remodeled more than 165,000 swimming pools. He also served as the founding chairman of the National Plasterers Council and, for four years, helped mold what he describes as the "rowdiest sub-trade" in the industry into a dynamic trade group with industry-wide influence. Hughes earned a bachelor's degree from the University of Utah and a master's degree in taxation from the University of Southern California and now works as a Certified Public Accountant. He lives in the mountains of southern Utah and does what he can to keep a toe in the water.

Andrey Berezowsky is co-founder of SWON Design in Montreal. An artist and designer whose experience spans some 30 years, his passions have included furniture and industrial design, stained glass and glass blowing. He worked in Germany for five years with some of Europe's finest glass and neon

artists and has developed a knowledge of materials and processes that has allowed him to work in a multitude of mediums with refined skills and a knack for creating beauty. **Michael Batchelor** is the other co-founder of SWON Design. He worked as an assignment photographer for 17 years in an operation with offices in Montreal and Toronto and has worked for some of the top advertising and design firms in North America. In addition to his award-winning work as a still photographer, he has been involved in the film industry and also worked as a design and communications director for Sonnet Media, where he honed his skills in design, marketing and product development.

Kirk Butler is president and founder of Cactus Stone & Tile, a supplier of glass mosaic tile and ceramic tile and a variety of stone materials in Phoenix. He started the company in 1973, working initially out of a 1958 pick-up truck and a small dirt yard with a single line of terra cotta tile imported from Saltillo, Mexico. Since then, Butler has developed the business to in-



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clude scores of tile and stone products procured from manufacturers and quarries around the world and has aimed his entire operation at providing designers, contractors and their clients with a broad spectrum of products that fuel creative designs and installations.

Giorgos Eptaimeros is owner of Pool World, a pool and spa design/installation firm located in Beaverton, Ore. He was born in Athens, Greece, where his first experience with construction came at the age of 12, when he helped his father, a construction worker, build the family's summer home. Eptaimeros continued to work in construction while serving in the military and attending college. His background helped him secure jobs with a large commercial-construction company and with a smaller company that specialized in public-school projects. Eptaimeros met his wife while she was traveling in Greece in 1990, then moved to Oregon the following year to be with her. In 2000, he purchased Pool World, an established firm whose owner wanted to retire. He then refocused the company's efforts on

pool design and construction and has seen the company grow strongly in the past eight years.

David Tisherman is the principal in two design/construction firms: David Tisherman's Visuals in Manhattan Beach, Calif., and Liquid Design of Cherry Hill, N.J. A designer and builder of custom, high-end swimming pools since 1979, he is widely known in the pool and spa industry as an advocate for the highest possible standards of design, engineering and construction. He has degrees and credentials in industrial design, scientific illustration and architectural drawing from Harvard University and Art Center College of Design and has taught architectural rendering and presentation at UCLA. An award-winning designer, he serves as an industry expert for California's Contractor State License Board. Tisherman is a co-founder of and principal instructor for the Genesis 3 Design Group and was also a 2008 recipient of The Joseph McCloskey Prize for Outstanding Achievement in the Art & Craft of Watershaping.

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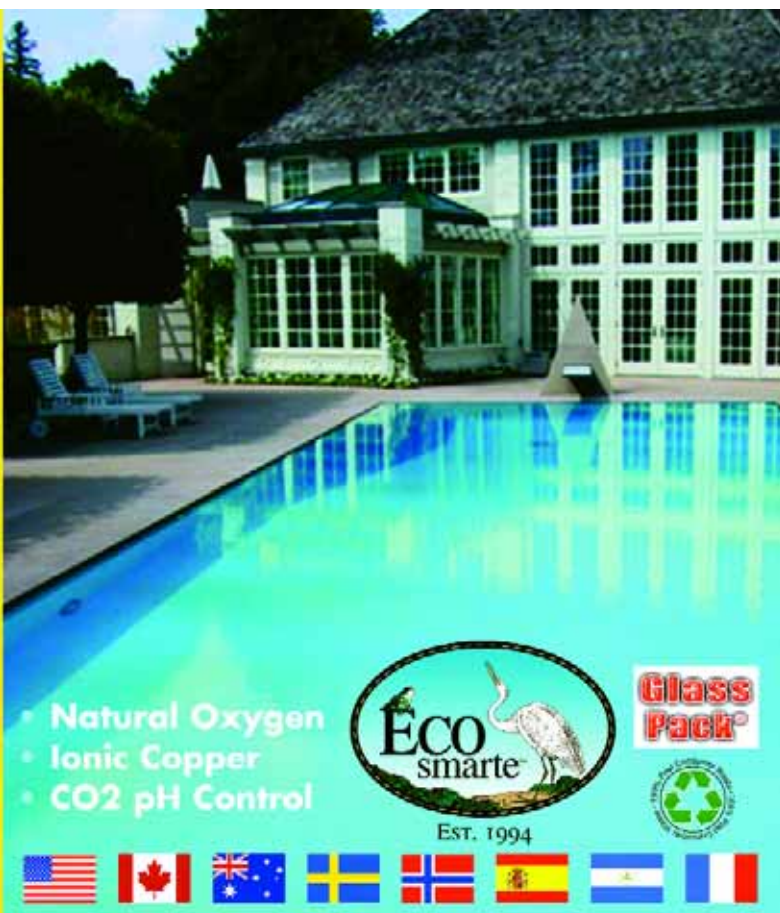
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By Brian Van Bower

The Light Ahead



Through the past several months, we've heard all sorts of voices discussing the current state of economic affairs – including mine in last month's "Aqua Culture" column, but, more predominantly, those of representatives of the 24-hour-a-day news media.

Anyone who isn't living in a cave is by now aware that we're caught up in an economic crisis of global proportions and that the consequences may be dire. We've heard that line so often and with such fervor, in fact, that it's numbed me to its influence. That's not to diminish the seriousness of what's happening, but rather to question the media's relentless pounding of the storyline.

We know the score, so enough already!

Frankly, I believe that ongoing coverage of the economic crisis in the mainstream media has actually become part of the problem by loading us up on fear instead of building optimism and a positive sense of the road ahead. As I see it, the key to sparking a recovery involves fostering a wide willingness to invest in the future and be bold in our decisions – as consumers, as investors and as businesspeople.

To put it another way, the best thing we can do sometimes (and I believe this is one of those times) is the exact opposite of what conventional wisdom or popular opinion tells us to do. Take the stock market as an example:

What I observed was an optimism and energy of the sort I haven't seen reported in the media in ages, and I just wish CNN could've been there to observe and report on the positives that were evident right from the start.

Is there any doubt that there are great deals to be had right now? I, for one, am looking to buy stocks instead of sell them, for the simple reason that when things turn around (as they inevitably will), there are going to be all sorts of forward-thinking people who will make bundles of money, and I want to be among them.

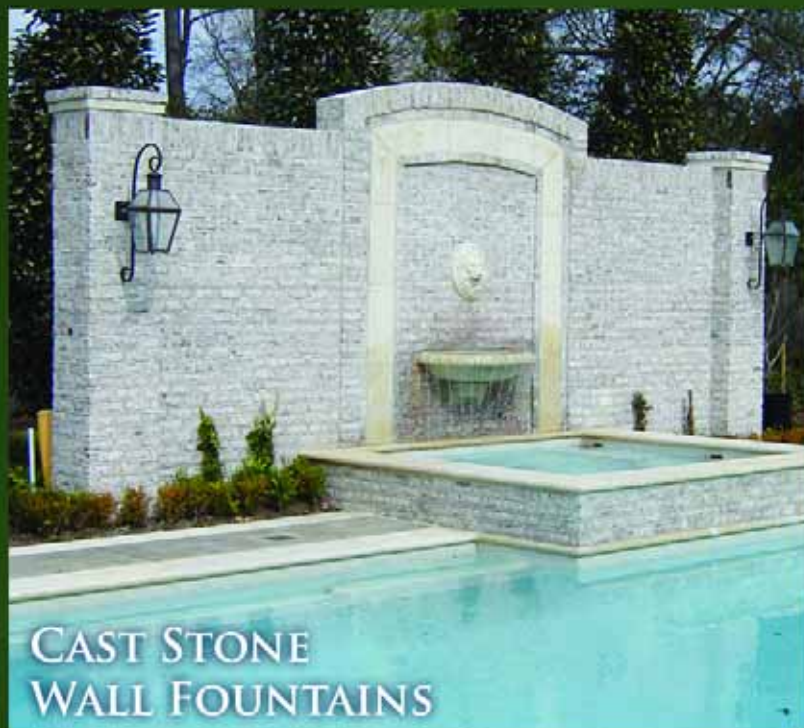
a time to dance

Enough generalities: My main purpose in revisiting this topic has little to do with exploring macroeconomic trends or where we're headed as a nation. In fact, what I want to do here is focus on my experiences this past November at the International Pool | Spa | Patio Expo in Las Vegas.

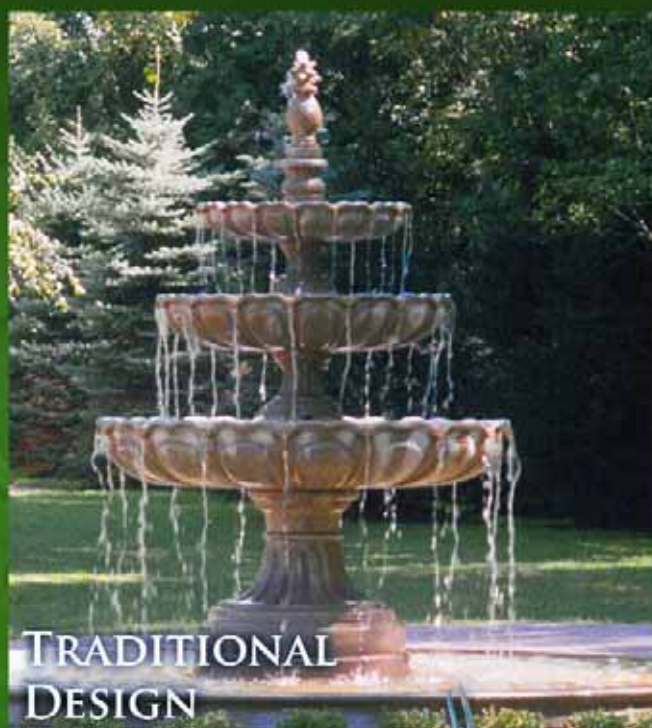
Before the show, there was all manner of speculation that it was going to be a serious bummer: Some of our industry's major manufacturers had decided not to exhibit; tales of businesses going under were exchanged daily; and there were, I'd say, many valid reasons to fear that the show floor might turn out to be something of a ghost town.

As it turned out, attendance was noticeably off and there were some distinct gaps among participating exhibitors, but that's really where the bad news basically stopped. In fact, what I observed was an optimism and energy of the sort I haven't seen reported in the media in ages, and I just wish CNN could've been there to observe and report on the positives that were evident right from the start.

I knew going in that our Genesis 3 design schools were going to be well attended. In fact, registration for our programs reached the levels of previous years, and it wasn't just our "regulars": There were lots of new faces in the crowd as well. Most telling of all, our annual



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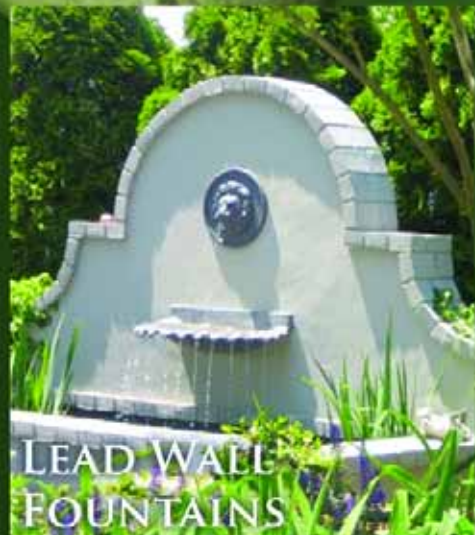


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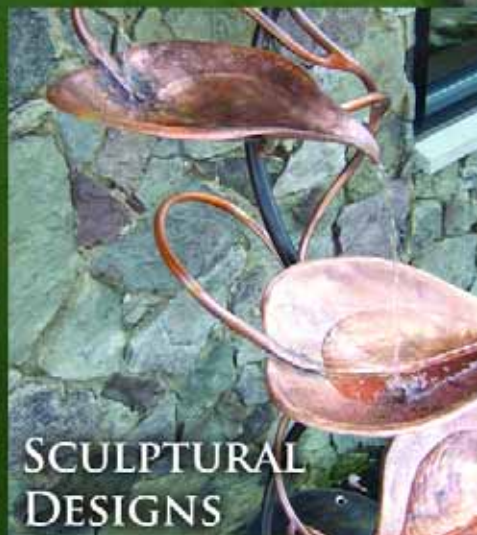
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Winemaker Dinner was sold out. That's a relatively expensive event – a luxury even in great times – but nonetheless we attracted a full (and boisterous) crowd of people who showed up intending to have a really good time.

And that seems to have worked out well. There, in the midst of all this bad economic news, I found myself dancing the night away and having a perfectly wonderful time. At several points along the line, I had to ask myself, "What's wrong with this picture? Aren't we supposed to be depressed and forlorn right now?"

It certainly wasn't the case at our Genesis 3 event, and I heard confirming reports from across town that the show's main welcome party was a smashing success as well. All in all, it seemed that there were plenty of people wandering around the show who didn't read the memo instructing them to be downcast, demoralized and depressed.

Of course, the fact that some people were willing to kick up their heels at a couple of fun events does not tell the whole story, so let me back up a bit.

more than parties

On the first morning of the show, I attended the keynote speech by NBA legend and sports commentator Bill Walton. I'm not a huge basketball fan and never followed Walton's career: I went to the meeting hall not knowing quite what to expect and was pleasantly surprised by how dynamic and upbeat his presentation turned out to be.

In fact, it was the perfect message at just the right time: He spoke eloquently about making the most of your talent and opportunities, shared inspiring stories about his time with the great UCLA coach John Wooden and did what I thought was an impressive job of tying his message directly to the pool and spa industry. I left feeling good and hoped passionately that others in the room that morning had absorbed the essence of what Walton had said.

Once his speech ended, I walked with the crowd down to the pre-function area where people were gathering to wait for the exhibit hall to open. This is when I knew something special was in the air: Instead of a sparse gathering of appre-

It seemed that there were plenty of people wandering around the show who didn't read the memo instructing them to be downcast, demoralized and depressed.

hensive people, I was moving along with a throng of obviously enthusiastic people who seemingly couldn't wait to get out on the show floor.

That was when I really wished that CNN (or NBC, CBS, ABC or Fox) had been there to file a report. Here we were, in the midst of a down economy in an industry that provides what some people see as discretionary or luxury products, but the businesspeople were showing up in enthusiastic numbers and, instead of crouching in fear, were eager to educate themselves, meet with their peers and see new products. The crowd outside the hall was thick enough that I had trouble making my way through them so I could get to our Genesis 3 booth.

Then the show opened. As I mentioned above, attendance was a bit off from recent years, but our booth was certainly busy and I heard similar reports from other exhibitors. We were, in fact, going full tilt from start to finish, our area constantly filled with watershapers who wanted to talk about upcoming projects, seek information and make professional connections. In many cases, what I heard was that business was still as strong as it had ever been.

As I've pointed out in the past, the custom market has endured remarkably well during the past year of uncertainty and, to be frank, that is the audience Genesis 3 aims to serve. Still, the level of enthusiasm matched what I've seen in past years and, through it all, I couldn't help thinking that there's something going among watershapers that simply doesn't line up with what we've been told to think about the current economic climate.

into the light

All of this makes me think that there's a light at the end of the tunnel – and that it's not a train coming in the opposite di-

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rection. Maybe, just maybe, all of this stuff about optimism, education and ambition might just really be the antidote for these tough times.

Naturally, this belief must be balanced by a sober assessment of the current marketplace. Yes, there are businesses that are going to disappear and, yes, manufacturers are suffering as revenues drop and, no, I'm not proclaiming the onset of an upturn. Fact is, nobody knows just how long this down cycle will last, but we *do* know it won't last forever. And based on what I saw at the show (as well as before and after), there are plenty of people who will be more than ready to ride a new wave of prosperity when it finally rolls our way.

In the meantime, I believe we should all do our best to elevate our performance and enjoy our lives. Perhaps that means seeking new educational opportunities or even taking advantage of a slowdown in business to spend more time with family and friends. Maybe it's time to refocus your business and consider new strategies. As I see it, there's no sense at all in fretting over conditions beyond our control: Instead, what I want to do is assume that my company will prevail in these times and emerge stronger and more confident than ever when things turn around.

I also see positive things coming out of the political changes we've seen. As you read this, Barack Obama has just been sworn in as the 44th President of the United States, and even though I'm an economic conservative and do not share many of the beliefs of some of my more liberal fellow citizens, I can't help being proud that our nation has elected its first African-American president. I may have preferred the other guy in policy terms, but it was important for our country to plot a new course and I wish Obama and his administration the best of luck.

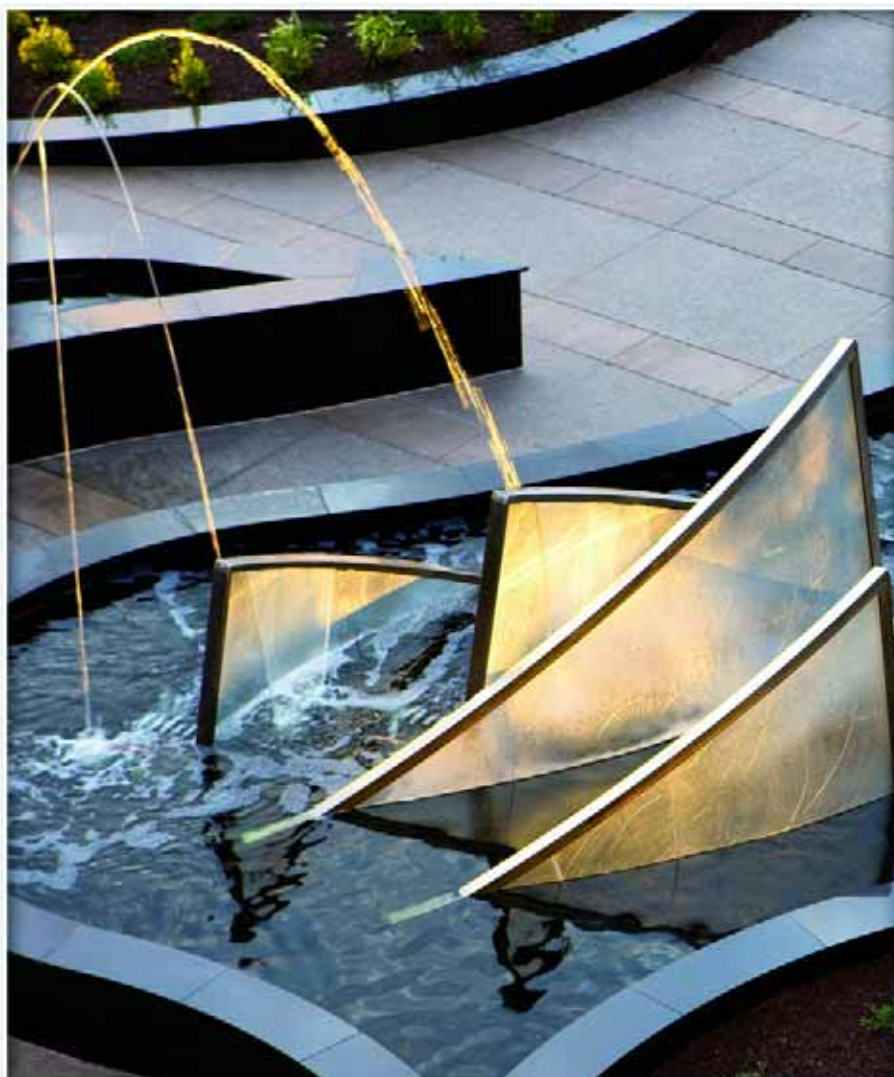
Divisive partisanship does not accomplish anything other than perpetual divisiveness. Spirited debate touched by optimism is a far more fruitful approach – and is, to borrow an omnipresent campaign slogan, the sort of change we need.

Indeed, I appreciate Obama's hopefulness, and my wish for all of us is that he succeeds brilliantly and manages to elevate our society's collective mood. I want

him to preside over a strong recovery, and I'd be willing to wager that if he and other leaders saw the attitude displayed by watershapers in Las Vegas last November, they might all point to it as an example of our indomitable American spirit.

There is light ahead. It'll be great when it shines more brightly, but in the meantime, I don't see any need to stop dancing. **WS**

Brian Van Bower runs Aquatic Consultants, a design firm based in Miami, Fla., and is a co-founder of the Genesis 3 Design Group; dedicated to top-of-the-line performance in aquatic design and construction, this organization conducts schools for like-minded pool designers and builders. He can be reached at bvanbower@aol.com.



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By Bruce Zaretsky

Planting Pains



Early in the history of garden design – dating back to the earliest days of civilization in Sumeria, Egypt and China – plants took center stage in garden spaces. Terraces and hanging gardens were built not for their innate ornamental qualities, but rather to display the plants they contained. Always, the prized plant was more important than its container.

This preeminence of plant displays has been the rule rather than the exception throughout history, even up to modern times. And the passion among gardeners for new and unusual plants has never waned: Open up just about any landscape magazine, and you'll find pages dedicated to the newest hybrids or discovered plants, and this is so because our residential and commercial clients crave new and unusual plants and unique, dramatic displays.

Based on what I've seen through the past 20 years or so, however, it seems that increasing numbers of landscape contractors are becoming more interested in pavers than in plants. Indeed, I see my colleagues putting significantly more effort into installing paver patios or pool decks than on the plantings that should complement them. Nowadays, in fact, it often seems that the plants are just an afterthought – a bit of greenery thrown in as a visual break without much (if any) consideration of how it all looks.

I've actually reviewed plans that had trees specified for placement in the middle of the asphalt driveway – not in an island, mind you, but literally *in the asphalt*. Lack of consideration for proper planting design almost invariably leads to significant problems.

least resistance

As I've mentioned in several previous columns, I serve in a landscape-consulting role with a local township in the Rochester, N.Y., area. I've lost count of the times that I've had to speak up about haphazard, inadequate planting plans, and what I've run into again and again is engineering firms that don't even have a landscape designer on staff and instead just assign the "landscape design chores" to an associate engineer.

The upshot of this is that I've actually reviewed plans that had trees specified for placement in the middle of the asphalt driveway – not in an island, mind you, but literally *in the asphalt*. This lack of consideration for proper planting design almost invariably leads to significant problems down the line.

And the problem isn't restricted to engineering firms: The repetition of these situations through the years has led me to conclude that too many designers get so caught up in the hardscape portions of their landscapes that they fail to consider the final planting design or the consequences that follow the plants they end up selecting.

Homeowners are part of this picture as well. They'll go to the nursery and see cute little plants in cute little containers, take them home and plant them too close together about two feet from (your choice) a walkway, the foundation or the swimming pool. They don't ask and don't seem to care how big those plants will get, so five years later, they find themselves spending a Saturday a month wrestling their (formerly) cute little plants into submission with hedge shears or chain saws.

In the case of homeowners, they bear blame for not having asked questions. By contrast, experts in the landscape design and installation fields have no such excuse: Incorrect plant selection results

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in installation of plants that don't fare well within given climates, require more extensive watering and insecticides and, no matter the effort, never really look as good as they should.

So what do you call it when an "expert" picks the wrong plant and puts it in the wrong place? I'd call it stupidity, but there are some in the legal community who

would call it negligence: There is absolutely no justification for planting a forsythia or a large-scale yew up against a pathway, staircase or foundation — unless, of course, it's your intention to involve clients in a constant need for pruning or tempt them to alleviate the burden by shaping the plants as lollipops or bowling balls.

And if it's *not* negligence, it must be in-

tentional — and my suspicion has long been that some landscape contractors install these plants where they do as a means of selling maintenance contracts and keeping their employees busy. These employees come in once per month to "maintain" the shrubs, and the most obvious way to demonstrate steady performance of this service is to take a hedge trimmer and sculpt everything in sight into the aforementioned lollipops and bowling balls.

getting steamed

Not only is this variety of "maintenance" a colossal waste of resources and time, it also harms many of the plants and, in the case of a properly designed landscape, destroys the aesthetics carried in the original design and leads the maintenance crews to do battle against the plants' own genetic characteristics and growth mechanisms.

A couple of years ago, for example, I designed a pocket park right in the center of the retail and commerce sector of a small local town. We scattered benches throughout the park to invite relaxation, and because the park was specifically intended to entice the employees of local businesses out for lunch or a cup of coffee, I made certain the plan included many fragrant plants that would flower throughout the fair-weather seasons.

As many of you doubtless know, certain plants flower at certain times of the year. Where I work in the northeast, spring-flowering plants set their flower buds the *previous year*. There are a few exceptions, of course, but plants that flower in May, for example, will set their buds for the next year during their summer growth period. So what happens if you cut off the buds? Well, you get no flowers the following spring.

In my pocket park, I had included lots of spring-flowering plants, among them many lilacs (the unofficial symbol of Rochester). In particular, I used a variety called Miss Kim that, in our area, grows to no more than six or seven feet tall (compared to other lilacs that grow up to 15 feet) and is much more fragrant than traditional lilacs.

In this case, the Miss Kim lilacs were placed near a bench and were to perform



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Forsythias are wonderful plants, and I've never been able to understand why so many homeowners plant them where they don't fit into any palpable plan – or why they or their maintenance contractors then insist on treating them like French poodles.

in a country where *anyone* can go into business, whether they know what they're doing or not.

In those circumstances, it's up to homeowners and commercial clients to do the vetting, and that's not quite fair because the consumers of our products and services seldom know what questions to ask, which buttons to push and how to separate the wheat from the chaff.

Faced with this situation, the only way true experts can distance themselves from the field is through a constant process of education and steady production of planting plans at exceptional levels of sustainability, quality and beauty. The bottom line here is the same as it is with shoddy construction of hardscape and water-shapes: The poor use of plants produces costs and aggravations that far exceed the time and energy spent in learning how to do things the right way.

Construction failures may be more dramatic and merit more attention, but the

double duty as sources of wonderful fragrance and, collectively, as a screen around a series of air conditioning units attached to one of the buildings flanking the park.

Imagine my horror (yes, horror!) when I was driving by the park and saw a local maintenance contractor shearing the lilacs into perfectly round balls. I nearly caused an accident as I pulled over, drove onto the curb and jumped out, waving my arms and yelling at this innocent employee who had no idea who I was and had absolutely no idea why I would be yelling at him when he was simply doing what his boss had told him to do.

in the know

With that story front and center, allow me to get to the question that underlies this discussion: Why are inexperienced and uneducated people making all these decisions?

Going back to the start of this column, why has attention to plants given way to a fascination with pavers and hardscape? Why do the engineers who do so much of the design work for our cities and towns relegate "landscape design" to second- or third-level staffers who have no real interest in plants? Why do the sup-

posed "experts" in the landscape design and contracting fields so frequently select the wrong plants and put them in the wrong places?

Stepping past self-interested (and perhaps negligent) contractors who want to generate an annuity with maintenance work, I trace all of these problems to a lack of education.

I'm the first to proclaim that what I do for a living is neither brain surgery nor rocket science, but there still is much to learn. And while we are fortunate to live in a country where you can simply print cards and be in business, there's an unfortunate flip side that's also true: We're

This is a case where a whole lot of effort has gone into pruning a multiplicity of trees and shrubs. In attempting to inject a sense of order, however, the homeowner or maintenance contractor has ironically made a well-ordered planting plan seem disorganized, even chaotic.



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It's not that I'm absolutely opposed to shapely pruning of shrubs or even to topiary treatment of suitable trees. To the contrary, my desire is for maintenance contractors to get educated so that, instead of demonstrating that they've done their jobs by turning plants into something they're not, they can enable plants to thrive – and help designers preserve their intentions.

proliferation of improper planting designs (and the plants they contain) is a more consistent offense.

Let me be blunt: If you can't find the time to get educated in these matters, in the long run it pays to retain the services of someone who has made this investment: A proper planting design will enhance a setting immeasurably for years to come – and you won't cause accidents when you drive by and see the hedge trimmer being pulled out of the maintenance contractor's truck. **WS**

Bruce Zaretsky is president of Zaretsky and Associates, a landscape design/construction/consultation company in Rochester, N.Y. Nationally recognized for creative and inspiring residential landscapes, he also works with healthcare facilities, nursing homes and local municipalities in conceiving and installing healing and meditation gardens. You can reach him at bruce@zaretskyassociates.com.

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By Mike Gambino

Containing Glare



In the landscape lighting business, we often hear complaints about glare and get lots of questions about how to bring it under control. In some cases, it's a minor annoyance, but in others, some clients are so sensitive to the discomfort it can produce that it ruins entire lighting designs for them.

So what exactly is "glare"? I define it as light transmitted directly from a source into an onlooker's eyes (either directly or indirectly) in such a way that it's a nuisance. Beyond the squinting that can result, the problem is that, where this glare occurs, it's likely an observer's attention will become fixed on the source of the glare rather than on anything else the light makes visible in the landscape. In other words, how you handle these situations can spell the difference between a successful lighting design and one that is a complete failure.

That's no small dilemma, because it's almost impossible to eliminate glare completely. This is why, when I start working with new clients, I always let them know that glare can't be entirely avoided because, in lighting any object within a landscape, it's almost always possible for someone to reach a point in the space where they will be directly exposed to a light's beam spread.

What I then describe is a delicate balancing act: We will reduce glare to the greatest extent possible, but we also know that if we go too far down that path, we might as well not try to light the landscape at all. Indeed, I'll go so far to say that a landscape lighting program without glare is likely to be lacking when it comes to character or interest.

The art comes in managing glare in the specific context of a given landscape while weighing it against the sensitivity of the client.

A certain amount of glare simply comes with the territory: The art comes in managing it in the specific context of a given landscape while weighing it against the sensitivity of the client.

bright strategies

Some landscapes help by establishing an observation point on just one spot or one side of a space – through a window, for example, or from a patio or deck that stretches along the back of a house. In such cases, it's relatively easy to control glare by aiming all of the fixtures away from the prime viewing angle.

That simplicity is rare these days, however, because modern landscapes are about exterior rooms and destinations – elements that invite people to move out into the space to enjoy the fullness of a setting. Here, because of the multiple vantage points involved, it's basically impossible to eliminate all sources of glare and still do a landscape justice after dark.

Sensitive clients will want that glare to be minimized, even if it means sacrificing some aesthetic effects, but others won't mind so much and will accept the fact that there are places where they'll be exposed to glare. As a designer, I lean to the sensitive side: When I look at a space and see a point of light shining directly back at me, I immediately start thinking about ways to soften the effect, mainly because I want to avoid the visual distraction.

Even if I'm successful in that effort, however, I let my client know that if someone moves through the landscape into an area we might call a secondary or tertiary viewing position, then it's very likely he or she will be exposed to glare.

With that in mind, I spend a good portion of my design time understanding where the *primary* viewing areas are going to be and how to optimize effects from those vantage points. That sounds simple enough, but it still requires some care if you want to avoid basic mistakes.

Continued on page 24

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If you happen to put your eyes between this fixture and the object it's meant to illuminate, you will experience glare of the most painful variety. Avoiding such situations is sometimes simple to do, of course, but in many cases it can be a surprisingly difficult challenge.



The long, adjustable shield on this bullet-style fixture can be positioned to favor the primary viewing area and block a source of unwanted glare.



A baffle (such as the honeycomb louver seen at lower left) or various lenses can be used in many situations to diffuse a light source or alter its photometric properties in such a way that fixtures become lesser sources of glare.

If, for example, you're lighting a planting area in the front of the house, you wouldn't be mistaken in assuming that the primary viewing angles are out on the street or from the driveway or along a front walkway. But there can be trouble if, additionally, the homeowner has an easy chair inside the house and likes to look out the window above that planter. If you lack information on this *second* primary viewpoint, you might well place a fixture that shines right up into the client's eyes every night.

Clearly, this is a communication issue, and I spend lots of time talking with a client about personal habits and preferences at the same time I'm trying to figure out how much glare he or she might be willing to tolerate. Armed with all that information, I can begin planning a lighting scheme that achieves the desired aesthetic effects while eliminating (sometimes painful) visual distractions.

This information drives lots of decisions. If, for example, the client is inter-

ested in a moonlight effect or wants to light a statue or piece of sculpture, there's really only one spot in which to place a fixture and glare is likely to be a factor from several angles. Some clients will want the effect and won't care about the glare in this specific case; others, however, will prefer to live without the effect, however desirable, simply to avoid any visual pain.

mechanical solutions

The information gathered so far gives me what I need to decide which methods I'll be using to control glare. There are basically two, the first having to do with shields, baffles and lenses installed on fixtures, the second about objects in the landscape (rocks, dense plantings or architectural features) that can be used to mask light sources.

With fixture components designed to mitigate glare, it's important to recognize that they significantly limit the spread of the light and its characteristics. If you take a raw lamp (*lamp* being the term lighting people apply to what most of us

call *bulbs*) and shine it at a wall, it will have a tremendous spread; if you take that same lamp and put it in a fixture, the spread is reduced to an extent determined by how the fixture surrounds the lamp.

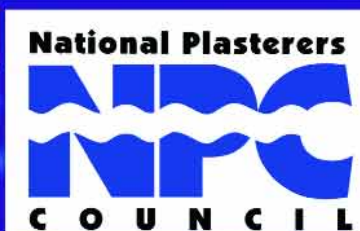
When you take another step and place a shield of some type on that fixture, you completely alter the lamp's photometric qualities: It simply won't cast light on objects other than those captured within a very narrow spread – and the longer the shield, the narrower the spread. So if you're starting with a fixture that already has a small aperture, by shielding the lamp you can wind up with a light source that has a narrower beam spread. (You can counter that narrowing to some extent by moving the fixture farther away from the object that's being lit, but then you open up a greater possibility that someone will be exposed to glare.)

My point here is that there's a reciprocal relationship between controlling glare and achieving effective, desirable lighting effects – and it all folds back to

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the balancing act mentioned at the outset. There are situations in which shields and baffles have saved entire projects, but there's no guarantee that you can solve every problem with them. And it's also true that you might learn that glare is a problem only *after* the client has had a chance to live with the system.

With all of those variables in mind, let's look at the three most common types of fixture-altering components you can use:

► **Shields:** These devices include any additional part or extension of a light fixture that serves to conceal a lamp and lens. As suggested above, shields come in different lengths: The longer the shield, the narrower the beam spread becomes. Some shields will entirely surround the fixture and block glare from all angles except one, while others provide directional protection by shielding just a portion of a fixture.

As a rule, I avoid using shields that prevent water or debris from escaping the fixture. This is indeed a challenge, as many will be pointed at upward angles and can trap water or debris (a potential hazard). This is why I opt for shields that have spaces that allow water and debris to fall to the ground; generally, these are about 80 percent enclosed and 20 percent open.

► **Baffles:** These are anything you add to a fixture that mitigates the light's output or conceals the source from a given angle. In some cases, these might be structures that attach directly atop a lens – honeycomb louvers among them – and are effective in cutting down glare viewable from peripheral angles. These baffles don't eliminate glare by directly blocking the light (as is the case with shields); instead, they work by reducing the glare's intensity.

► **Lenses:** There are many types of lenses you can place on fixtures to alter a lamp's photometric qualities. They can be used, for example, to soften or diffuse the light, change its color or widen (or narrow) the beam spread. In landscape lighting applications, they should always be made of some type of tempered glass that will stand up to the heat generated by the lamp.

Most manufacturers do a good job of providing various forms of shields, baf-



Excellent glare control can be achieved with in-grade fixtures featuring deeply recessed lamps and brass grate covers (above). For path lighting, properly installed mushroom-type fixtures (right) are virtually glare-free because the light source is hidden within these fixtures' bodies.



fles and lenses for most of their fixtures. While I occasionally will need to modify a component or even make one from scratch to suit a particular need, for the most part I can always find equipment that meets my needs. The key to selection, of course, is knowing what you need and understanding the effect it will have on a lamp's characteristics.

in the landscape

Oftentimes, of course, I find non-mechanical solutions when it comes to reducing or eliminating glare. As mentioned above, these include the use of rocks, plants and walls or other architectural features.

Indeed, I'm *always* on the lookout for placements I can use to mask light sources, both because it saves on the expense involved in acquiring shields, baffles or lenses and because interesting effects can often be created by the way these "found" objects can block, reflect or even transmit light. Some foliage glows when lit, for example, and you can create interesting silhouettes in placing fixtures behind rocks or walls.

In fact, I've always liked to exploit these easy solutions to controlling glare whenever possible, and there have been many cases where I've worked with landscape designers or contractors to locate their rocks and plants to conceal my fixtures.

Not only does this knock down glare, but it also conceals the fixture itself so that the source is always hidden.

Such simple solutions aren't always available, of course, particularly when I'm working with architectural features such as walls, pilasters or sides of buildings – but I'm always considering ways those elements can be worked into the overall lighting program. It all depends on the situation and the constraints of the space as well as the client's priorities in terms of effects and areas to be lit.

As I noted at the outset, there's no way to eliminate glare completely, but there are lots of available options that enable you to reduce it to the point where it ceases to be a distraction. It can be tricky at times (and can even lead to design compromises in some cases), but it's always worth the effort: With landscape lighting, after all, the idea is not to be blinded by the light, but instead to be delighted and intrigued by it. **WS**

Mike Gambino owns and operates Gambino Landscape Lighting of Simi Valley, Calif. A licensed lighting contractor since 1990, he has specialized since 1995 on high-performance low-voltage systems. He may be reached via his Web site: www.gambinolighting.com.

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20 Years After

By Bruce Hughes

To celebrate the 20th annual conference of the National Plasterers Council, Bruce Hughes – the organization's founding chairman and former president of one of the industry's largest plastering firms – looks back on NPC's first years and the difficult process by which a feuding group of strong-willed contractors came together to form an association that has become a force for research, standards and industry progress.

I remember it well: The National Plasterers Council's first conference was a compact, one-day event in Los Angeles staged by an association that had only been around for about two years and had to that point been not much more than an ad-hoc regional phenomenon.

Rolling into its conference in Reno 20 years later, NPC has grown beyond both its regional orientation and its focus on the issues of plaster mottling to become a nationwide organization dedicated to advancement of the pool-plastering profession, establishment of workmanship standards, exploration of the effects of water chemistry on pool and spa finishes and development of an understanding of materials and application techniques used by plasterers.

Today, NPC has more than 1,000 member companies, produces sophisticated technical publications and operates a ground-breaking research center on the campus of California State Polytechnic University at San Luis Obispo. To put it mildly, the organization has come a long way since that first con-

ference – and an even greater distance from its difficult formation in the period leading up to that gathering.

I had the privilege of serving as NPC's founding chairman, and I'd like to use the opportunity of this anniversary to look back on those early days, tell the story of how NPC started and offer some thoughts on what I think the future could hold.

Common Cause

The emergence of the National Plasterers Council involved a number of fascinating twists and turns, starting with one of the nastiest problems ever to hit the pool/spa industry and followed by months of political maneuverings on seas of controversy.

It all began in the late 1980s, when the pool industry in southern California was hit by an epidemic of unusual (and previously unseen) plaster-surface issues in the form of severe, dark-gray mottling. Hundreds (if not thousands) of freshly plastered pools and spas rapidly exhibited terrible discolorations, and

both pool builders and homeowners angrily demanded that these pools be replastered at no charge. Things were so bad that numerous companies were driven to the brink of failure and a few were even run completely out of the business.

The curious fact was that some plasterers' projects were totally unaffected, while others had almost every one of their pools turn gray.

All of the affected companies were basically left to struggle with the problem by themselves. As events continued to unfold, I received a call from a local plasterer named Morrie Howard, a good friend of mine who had already attended several meetings in which the fiercely competitive plasterers of the San Fernando Valley area gathered to discuss the problem and try to come up with solutions. He invited me to the next meeting, and my initial reaction was a visceral one: If I showed up, should I put a locking gas cap on my car? Should I bring bodyguards?

In those days, you might remember, the pool-plastering business was about as rough-edged as it gets. These were hard-boiled professionals who were all considered to be both Lone Rangers *and* the rock bottom of the industry food chain. Nobody in the pool industry hung out with pool plasterers, and we were accustomed to being blamed for everything that went wrong in a pool. And to make things worse, I was president of DeMar Baron Pool Plastering, which, along with Kerber Brothers, was one of the dominant companies in the region.

Both DeMar Baron Pool Plastering and Kerber Brothers had been founded by men who are rightfully considered plaster-industry pioneers. In our case, Baron had followed the expansion of the pool industry, linking up with Anthony Pools and California Pools as they spread around the country. By the time I joined the firm, Baron had 17 branches from coast to coast, including a total of seven in California. He was, in short, a master of his craft, knew the business top to bottom and had become a truly dominating force.

Those two firms were the industry's Goliaths in southern California, and the competition was fierce between us and with the smaller, independent firms, many of which had split off from the two giants. When Howard called, I actually did express my concerns about the wisdom of having everyone in the same room. He assured me that the people he was bringing together were so concerned about the problem we were all facing that all had agreed to set aside past animosities. Out of this common cause, a fledgling group formed.

Howard let me know that if I went to the meeting, he wanted to put my name forward as the committee's chairman, based largely on my corporate background and familiarity with coordinating large groups. I agreed, but only on the condition that the as-yet-unnamed group would formally organize and establish an agenda that included not only research into mottling but also formulation and publication of uniform standards for plaster application. Everyone consented, and I was elected to head up what was soon to be known as the Plaster Mottling Committee.

On the Record

We began holding regular meetings in the Los Angeles area and desperately tried to figure out what was causing our mottling problems.

The incidences were so widespread that we quickly came to believe they had to have something to do with the materials we were using. In comparing notes, the common denominator we found was that the affected pools had all been plastered using material from Riverside Cement, a local supplier of white and gray cement products. Plasterers who had not been using Riverside had not experienced any of the same problems.

We contacted the company and asked for their input. Various representatives told us that this was the first they were hearing of the problem and that they were certain it had nothing to do with their product. It was a frustrating time. We had some general ideas about what might be going on, but all of our evidence was circumstantial, so there was little we could do other than complain.

Riverside even suggested that perhaps the problem was that every affected plasterer had suddenly started troweling their pools differently and that we had caused the problem ourselves. With support like that, it was small wonder that tempers were occasionally short.

In response, we had little choice but to dig in and investigate what was happening ourselves. As we started examining failed jobs, we soon discovered that the gray coloration could be "removed" by applying heat. This led us to believe that the

In those days, you might remember, the pool-plastering business was about as rough-edged as it gets. These were hard-boiled professionals who were all considered to be both Lone Rangers *and* the rock bottom of the industry food chain.

mottling was being caused by moisture somehow trapped in the plaster matrix – a suspicion later confirmed by laboratory analysis.

Our earliest solution, however, was simple, pragmatic and direct: We all started using materials from other suppliers.

Early on, the committee also took steps on the organizational front. We contacted Lyn Paymer, who was executive director of the Southern California Chapter of what was then the National Spa & Pool Institute. She agreed to work with us and suggested that we establish ourselves under the umbrella of the chapter. That made sense at the time, but our relationship with NSPI wouldn't last long.

As we became organized and started getting some recognition in the national trade press, we began hearing from plasterers in other parts of the country and learned that the problems we were experiencing in California were also occurring in Arizona – and with material from the same supplier.

Within months after our formation, we contacted several companies in the Phoenix area and proposed a meeting –

and once again I had the opportunity to fear for my physical safety. Indeed, that first meeting was one of the roughest I've ever attended: Tempers were universally short, resentments among various plastering companies were palpable and there was a great deal of yelling and lots of storming out of the room. I left wondering if we would ever work together, but before long we gathered again with a focus on solving the problems we shared.

(Some of NPC's future leaders emerged from the Arizona market in the course of these meetings, including Greg Garrett, Jay Eaton and many others who have played key roles since then in the organization's growth and success.)

Reaching Out

On an entirely different front, we began to reach out to the Independent Pool & Spa Service Association and the service community.

We saw this as essential, because in the course of addressing the mottling problem we recognized an inherent conflict between service technicians and plasterers: The cause of the problem was unknown, so the natural tendency of plaster companies was to blame mottling as well as many other plaster problems on bad water chemistry (and, by extension, service technicians) as a means of absolving themselves of liability; for their parts, service technicians were quick to return the favor and point a finger at bad plaster or plastering technique.

Interestingly, the rest of the pool industry was content to let

the plasterers and pool technicians fight between themselves to decide who was to blame for *all* pool problems so long as builders or material suppliers did not have to get involved.

More than 20 years later, the same conflict still largely exists between plasterers and the service community (see the sidebar below) – but it's important to note that we managed to establish an extremely productive relationship with IPSSA just the same. I give a great deal of credit to IPSSA's Stan Zielinsky and, later, Randy Beard, both of whom served as liaisons between the two organizations.

Symbolic of the progress we've made, NPC and its representatives have become fixtures on the educational programs offered at the Western Pool & Spa Show, an IPSSA-sponsored event. In addition, through the years IPSSA has been instrumental in working with NPC to disseminate technical information and cooperate on various research projects.

Perhaps most noteworthy in this outreach work, we eventually managed to bring Riverside Cement into the fold and enlist their aid in getting to the bottom of the problem we both faced. Early on, it took a lot of nerve on the part of company representatives just to show up at our meetings and deal with people who blamed them for much of what was happening.

We were not always courteous hosts: The tension was so high during one of our early meetings that a fist fight broke out in the parking lot afterwards between a plasterer who was on the verge of going out of business and one of Riverside Cement's representatives. I'm not proud of that, but it was tangible evi-

Seeking Balance

In rolling through my memories of events from more than 20 years ago, I'm saddened to recall the animosities that existed then between plasterers and service technicians – and sadder still that they largely continue to this day. I've long felt that we fight many common battles and often face them alone without much help from the rest of the industry.

As I see it, this lingering conflict has had the unfortunate effect of coloring the National Plasterers Council's ongoing research programs, leading to pursuit of studies that strongly support the conclusion that a vast majority of plaster problems – staining, etching, nodules and more – are attributable solely to water chemistry and hence are properly the concern of service technicians rather than plasterers or other industry participants.

I have always believed that water chem-

istry is a valid *part* of the story, but I also believe that the plaster matrix – including workmanship, materials and the pool environment – is complex and has yet to be fully addressed or absolved as a factor. Indeed, I have inspected several pools recently in Utah where workmanship that would never have been tolerated in California, Arizona or any other major pool market was 100 percent responsible for plaster failures.

The research at Cal Poly San Luis Obispo is being conducted on pools that are properly plastered by the best applicators in the business using only the highest-quality materials – and by design the studies to date have mostly involved variables related to water chemistry. Soon, I hope NPC will broaden its approach and add non-chemistry variables such as improper workmanship and faulty or im-

properly mixed materials to their growing list of studies.

I fully understand why NPC has focused on water chemistry to date, if only as a means of addressing its membership's concerns about problems for which they are truly not at fault. While the protocols for these ongoing research projects are impeccable and well-founded, however, the results of these studies will, in my view, *always* be controversial until the full spectrum of variables has been openly addressed.

I offer this thought in the belief that future studies will indeed broaden in scope and that what will emerge is a consensus that once and for all will allow us to set aside controversy and focus on the work of providing consumers with great pool finishes.

– B.H.

dence of just how seriously these issues were taken.

Through it all, however, we managed to conduct a number of formal and informal studies, develop the first edition of the council's Technical Manual and establish ties to individuals, companies and associations beyond our own group. Just as significant, we managed to take a diverse, disparate mass of professionals and develop a real sense of camaraderie within the pool-plastering industry.

Going National

Our next big step came in 1989, when we were ready to publish our manual and discovered that we needed about \$10,000 to get it done. Working through its Southern California Chapter, we sought support from NSPI's national organization, which had just formed a Builder's Council. NSPI didn't have any subcontractor councils, so after the Builder's Council decided they didn't want us, we became an "ad-hoc subcommittee-at-large."

To our advantage, this involvement led us to work with a number of persuasive industry leaders – several hailing from the northeast – and gave us a national platform. But the process of finalizing the information in our Technical Manual ran into roadblock after roadblock and meeting after meeting marked by controversy and no small level of backroom arm-twisting.

Fortunately, a few people came to our aid. I particularly re-

call and value the support of Connecticut builder Al Rizzo, who proved instrumental in trying to keep everything on track throughout the negotiating process.

But it wasn't meant to be: Ultimately, we reached an impasse with NSPI's national staff and, before long, we decided that it was in our best interest to sever our ties with NSPI and look elsewhere for support. This is when the National Plasterers Council was formed as an independent, free-standing organization.

As mentioned above, NPC is now a nationwide entity and continues to press forward with research projects and publications aimed at developing uniform standards for plaster application and information that will help all of us understand and resolve pool problems. Having fled to the mountains of southern Utah, I'm no longer part of the industry, but I've remained an active observer of the organization and do all I can to keep current with its ongoing research.

I applaud all those who have worked so long and hard at advancing NPC's goals and could go on for many more pages chronicling the organization's development and listing dozens of people – many of whom have been there from the beginning – who deserve shares of credit for the group's success. But let me leave off here by congratulating NPC on the occasion of its 20th annual conference and offering everyone involved with it my best wishes for future success.

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WATER SHAPES



Challenged to develop a sculpture that would make a strong statement about the commissioning company's expertise in engineering and motion-control technology, Michael Batchelor and Andrey Berezowsky of Montreal's SWON Design delivered a work of subtle beauty to an otherwise stark architectural context. Here's a close look at the resulting medley of textured glass, sheeting water, gleaming steel and arcing jets, all set within curving ponds.

Sailing Grace

By Michael Batchelor & Andrey Berezowsky

With residential projects, the importance of understanding the character and focus of the client is widely recognized and appreciated. Although the scales are different and the "clients" may be committees, we've discovered that the same is basically true with commercial projects as well.

A case in point is this project, which we completed for Parker Hannifin, the Mayfield, Ohio-based manufacturer of engineering components and a multi-billion-dollar company whose products are found on everything from Space Shuttles to precision industrial machinery. Appropriately, the sculpture we were asked to design was to reflect a highly refined, disciplined sense of beauty.

We at SWON Design were first contacted by an independent marketing consultant, Karen Skunta, who was participating in the company's effort to re-brand itself – a program that, in part, included upgrading the landscape surrounding its corporate headquarters. She had read the article we published in *WaterShapes* in October 2005 ("Glass Works," page 56), liked what she'd seen and thought we might be a good fit.

What the company was after, she said, was a sculptural feature to be mounted in a 52-foot-long architectural pond that was to form the core of the revised plaza at the building's entrance. She let us know that Parker Hannifin was interested in something that would symbolize the company's high-tech aspiration – but would at the same time appeal aesthetically to visitors who come to visit from all over the world.

The company, we discovered, does business in 48 countries and conducts a significant amount of business on its Ohio campus. What was needed was a work of art that would have immediate, uncomplicated visual appeal.



Technical Value

When we met with the design team, which included local landscape architect Kathy Jankowski and several others, we were asked how we thought our work would fit within the context of this high-tech company. We straightforwardly explained that our sculptures have almost invariably been about precision in the way we work with glass, metal and water. By nature, we said, it was a good match.

Given the go-ahead to make a formal presentation, we returned to our studio in Montreal and generated a variety of design sketches. In doing so, we communicated steadily with Jankowski, who had been responsible for the design of the watershapes and the rest of the plaza. We also were in contact with Hobbs Fountains (Atlanta), who had been selected by the design team to provide the fountain effects. In doing so, we simultaneously dealt with the issues of scope and scale – the size of the sculpture, how it would be mounted and the way it would interact with the water elements.

Jankowski had already devised a set of raised, crescent-shaped watershapes, the main one of which was to include “some sort of sculpture.” These ponds were to be finished in Black Absolute Granite and were to have extremely contemporary looks to reflect and amplify the sleek architecture of the building itself.

Their curvilinear forms, which played off a round, turret-like entry to the building, gave us the advantage of being able to develop a work of art with flowing contours that would contrast the (primarily) rectilinear design of the plaza and the building itself.

We became involved in November 2006, by which point no definition or consideration had been given to the sculptural component of the project: It was a completely blank slate beyond the predetermined shape of the ponds. After familiarizing ourselves with the company and its corporate mission of supplying the world’s need for advanced motion-control systems, we began thinking about imagery that would suggest movement within a carefully controlled, engineered design.

It wasn’t too long before we were energized by the idea of a set of large glass sails – a concept that seemed to accommodate all of the emotional, psychological, symbolic and practical criteria we’d been weighing.

Before we reached that point, however, we’d been through several design iterations. As the process unfolded, we had the sense that the people at Parker Hannifin were wondering if we really understood what they wanted. The sails changed all that: They immediately liked what they saw, and within weeks we finalized the design based on a model, perspective drawings and CAD renderings.

A key through this process: We provided them with samples of the glass we planned to use so they could touch it, look through it and get a feeling for its weight and thickness. We accepted the commission in January 2007, and everyone’s hope was that we’d be finished by the end of the year.





Slicing Forms

Working with glass, we knew that we would be able to create a visually open feeling with the sculpture, playing off the ability of the material to distort views and transmit light. We also would be playing with the material's fluidity – a perfect complement to water. As designed, the sails appear to cut through the water, and some people have told us that, at first glance, they look like the dorsal fins of sharks or dolphins.

There are nine overlapping sails in all, with their curved forms interacting. The slumped glass was supplied by a company in Montreal that had cut and textured it to our exacting specifications. The dimensions were critical, as the panels were to be contained in frames that would lend the work

By design, the sculpture we developed for the plaza in front of this corporation's headquarters is all about sophistication and a refined, disciplined sense of beauty – a direct reflection of the company's production of precision-engineered products. From all angles and distances, it also speaks to the company's current desire to upgrade its brand, image and public presence.

a clean, architectural look.

The frames and mounting brackets – all in stainless steel – were fabricated by another Montreal company that specializes in precise architectural fittings. The brackets were to be doweled into the floor of the pond along the lines defined by the radius of each piece of glass, and all were to be canted over at ten-degree angles as though they were being influenced by a gentle breeze.

The frames are all rigged with rubber pads so there is no glass-on-metal contact, and every component was designed for sturdiness. Given the inherent strength of the half-inch-thick glass we were using, we had no concerns about the wind, which we knew gusted through the plaza with occasional intensity.

It was crucial, of course, for the stainless steel components and the glass panels to be exactly matched. Given the tightness of the schedule, however, we weren't able to follow our usual practice of checking and preassembling everything in our shop: Instead, the first time steel and glass came together was on site during the installation phase. It was risky, but everything fit *perfectly* – a credit to the capabilities of the firms we chose to do the fabricating.

Five of the nine sails have water flowing over the glass from



Whether seen from inside the building or from the parking lot (or encountered in broad daylight or at night), the glass sails capture emotional, psychological and symbolic values the company wants to convey both to its staff and to anyone who happens to visit: The composition is open, fluid and engaging and serves its purpose both as a gathering place and as a work of art.





manifolds contained within their frames. We'd considered having water flow over all nine, but we ultimately decided that it would be more interesting to exploit the contrasts between the wet and dry surfaces.

Hobbs Fountains provided these sheeting-water effects and was also responsible for mounting three jets in a smaller, crescent-shaped pond positioned a few feet away from the main pond. The jets send arcs of water over a 12-foot-wide walkway between the ponds, reaching a height of approximately 15 feet. This playful feature was added at Parker Hannifin's request: They wanted moving water to be part of the overall composition – again symbolizing the company's expertise in motion control and adding to the plaza's overall visual and sonic appeal.

The effects work with circulated, filtered and ozone-treated water, so the clarity and quality are outstanding. All of the equipment is housed in a sub-grade vault located about 50 yards from the sails.

Mood Swings

While the completed project is a model of serenity and grace, the process of getting it done within the desired timeline was anything but: The installation process was, in a word, *miserable*. To make it happen, we ended up doing almost all our work on site in the dead of winter, with other trades scurrying all around us in a race with the deadline. We were relieved when it was all over – and even more relieved that none of our components suffered any damage during the process.

Now that everything is complete, it's easy to forget those travails and get wrapped up in enjoying the sublime interrelationships of water and glass: The reflections, the distortion of light, the juxtaposition of the solid transparency of glass and the ephemeral transparency of water – it's all quite complex and wonderful. But what everyone seems to appreciate is that you don't need that sort of high-minded evaluation to enjoy the space. It all comes together with a simple beauty and grace and just looks great.

When the weather's nice, the raised granite beam around the pond is a fine place to sit and relax with the sails. As such, the composition is both a work of art and a destination within the



plaza: There's now a reason to pause and take in the surroundings, where without such a sculpture the plaza would simply be a mostly featureless passageway alongside a large, imposing building.

The display is sublime during daylight hours, but it takes on a different aspect at night, when the LED lighting we incorporated in the base of the pond comes on and gives the sails a fresh look by accentuating their forms in a soft glow. Even during the winter, when the ponds are dry and the water system is drained and shut down, the lights continue to operate – and yet another level of visual interest is introduced when the snow accumulates on and around the sails.

We completed our work on deadline in January 2008, and ever since we've received a steady flow of comments about how much our sails have added to the plaza and the working environment of Parker Hannifin's many employees. It's gratifying to know that this work will be there for them indefinitely and will continue to send positive messages about the company and its mission for years to come.

Hot and Cold

When we were in the design phase for the project described in the accompanying text, our clients expressed concern about how well the glass panels would hold up in extreme, Ohio-winter-type cold.

We explained that glass in general is to withstand extreme temperature differentials. Consider the glass all around your building, we said: It's exposed to extreme winter cold on one surface and warmed by the building's heating systems on the other, and it never cracks as a result.

That simple explanation satisfied their concerns, and the glass sails have stood up as expected.

– M.B & A.B.



After sunset, the real magic of the sails emerges as they change colors, dance on the water and take on a more animated look than they have during the day. Indeed, their soft glow gives them unusual visual appeal at the close of a workday, even when the ponds are drained and snow blankets the plaza.



A photograph of two men standing on a large, rectangular stone block in a quarry. The man on the left is wearing a striped polo shirt and jeans, while the man on the right is wearing a white t-shirt and dark pants. A blue hose runs across the top of the stone block. The background shows a large, layered rock face.

The Science of Selection

The availability of new and different materials has been a driving force behind the design revolution that has defined the watershaping industry for the past ten years. One key to that development, observes Kirk Butler of Cactus Stone & Tile, has been the willingness of suppliers to step into more progressive roles as purveyors of unique products that have blown the creative process wide open for watershape designers and builders – and their clients.



By Kirk Butler

In our business as a stone and tile supplier, we've often heard in the past 35 years that designers and contractors get tired of repetition: They come to us, they say, hoping to find things that inspire them to create projects that are new, unique and exciting.

Frankly, we on the supply side are subject to the same sentiment: While we may be intimately familiar with materials our designers and builders have used over and over again and have no objection to working with the tried and true, we're restless, too, and are always trying to find something new to bring to the table. Whether we're working with a pool designer, a landscape architect, an interior designer, a home builder or even a homeowner, we believe everyone benefits from access to a wide array of quality products and materials.

In our case at Cactus Stone & Tile (Phoenix, Ariz.), this means we literally travel the world to find and procure the widest possible range of hard-surface products, be it stone or tile. We beat the bushes across Europe and Asia and visit the far reaches of South America, dropping in on trade shows and fairs, introducing ourselves at quarries and processing facilities and doing whatever it takes to make connections with suppliers of various materials. In doing so, we aim at developing an understanding of what they have to offer, how their materials can be used and how those products perform once installed.

Not only do we make this broad

palette of materials available to our clientele in the United States, but we also, with our experience and knowledge base, often collaborate with designers and contractors by providing information, ideas and technical assistance to them as they work with their residential and commercial clients. All of this takes a substantial investment of time and energy, but it also makes our business far more interesting – and a lot more fun.

Striking Balances

The biggest challenge we face – and I'm certain this is one we share with other like-minded suppliers – comes in the educated guesswork we use in deciding which new materials to stock. Not only do we have to negotiate with our sources and figure out logistically how to bring cumbersome shipments to our Arizona facilities, but we also have to determine how *much* to stock to meet the foreseeable demand and then price everything accordingly.

Trying to anticipate demand is a particularly tricky exercise, and we've certainly endured our share of miscalculations through the years. We're constantly asking ourselves, "If a material becomes popular, can we resupply our stocks six months or a year down the road?" It's almost beside the point that the level of the demand is entirely unpredictable: As we see it, no matter the nature of the material, there's simply no point in developing an ongoing demand for a product if you can't continue to meet it.

On the flip side, we also know we're

dealing with natural materials – so of course nature has a role to play in determining what we do and how we do it. In the case of a granite material with unusual visual patterning or a Travertine of an exceptional color, we know these won't be mass-scale products we can stock and restock for years. As a result, we must decide up front if we think the material will prove interesting enough to a few clients that it's a good idea to take a leap and make available something that's both unique and precious.

It is, in short, a risky game, but our mission is to proceed sensibly and work with what we know our professional clients will welcome along with their residential and commercial contacts.

As part of a global network of companies that have declared an interest in finding the unusual, we hear about unique materials on a fairly frequent basis – and that's as true with tile as it is with stone. As a result of our explorations, we've established relationships with a wide array of companies that are on the same page as we are, and rarely does a week go by when I don't receive an e-mail from someone who wants to draw our attention to something new.

That constant flow of possibilities keeps us on our toes as we

try to make the best decisions about what will gain traction in the design/construction marketplace. Along the way, we've developed a great deal of awareness of what appeals to different companies and even what seems to work best in distinct, localized markets. We know, for example, that Las Vegas has a constant demand for red materials. We don't know quite why this is so, but we know that when we find an exotic red stone of just about any kind, all we need to do is make it known to our Las Vegas contacts; on the other side of the coin, there doesn't seem to be any demand at all for crimson-toned products in the Midwest.

On top of all this, we have to be aware of broader design trends. For whatever reason, materials move in and out of vogue, and what's hot one year might be completely out of the picture the next. There are no shortcuts here: Following the trend lines means paying extremely close attention to what designers and contractors tell us they want and how they read their clients' tastes and tendencies. Again, there's no escaping a certain amount of guesswork, but when we do have to take those leaps, we always try to make them while armed with as much specific information as possible.

Give and Take

Through the years, we've found that one of the fascinating aspects of working with truly creative designers is how opinionated they tend to be and how strong their ideas are about what they want by way of materials. With that in mind, we frequently walk something of a tightrope in working with them, because we know that they can't have *fully informed* opinions until and unless we let them know what's available at any given time.

That may seem a self-evident point, but what it means is that, while we're con-



Our quest for great materials has taken us all over the world, from sites in India and Mexico to the Irish quarry seen on the opening pages of this article. The relationships we've carefully built through the years give us the inside track when it comes to obtaining unique materials from a wide range of stone and tile sources.

stantly listening to their ideas about various materials to meet a current need, we're also thinking about alternative materials that might be an even better fit in a given situation. In many cases, this becomes a wonderfully creative give and take, but it involves a measured approach on our part to make certain the information and support we offer is a help and not a distraction.

It's ironic: Lots of people seem to think suppliers are in the business of dictating what's available, but in truth, we're in the business of responding to demand. If at any point we stop listening or even simply fail to listen effectively, we run the risk of making incorrect assumptions – something we do all we can to avoid.

So in addition to maintaining dialogues with individual designers and contractors, we also constantly observe trends in other industries, especially when it comes to colors.

When we see the paint, clothing, textile and auto industries moving toward warm colors, for example, that informs our explorations as we visit stone quarries and tile factories around the world. It's never an exact science, but we have found that preferences for colors in the construction-related industries do tend to follow trends found elsewhere in society.

With all that in mind, however, we still try on a fairly regular basis to “wow” the public with truly unusual offerings. Anyone who works in a custom design field, interior or exterior, knows that their clients quite often want something that no one else has. This means that, for all our careful monitoring of the markets, we keep our eyes open and frequently take chances on unusual products.

Sometimes we strike out; other times we hit it out of the park – and we never know how things will play out until *after* we've made our choices. These aren't small investments on our part, so it can be nerve-wracking. But it's also thrilling when we see our clients light up when they first learn about a new product.

One of the strongest examples we've ever seen of a material simply catching fire in a particular application is what's been happening with glass tile in swimming pools. We came to the watershaping market unaware of its potential, but in listening to what leading designers have been telling us, we've been able to move in a wonderful new direction and have seen the emergence of a whole new design vocabulary.

In Context

Given the fact that we absorb information about our marketplace from every available source (and not just watershapers), we've learned a lot from our clients about the value not only of *providing* unusual stone and tile products, but also of *demonstrating* how they can be used in various design environments. This is why our showrooms feature elaborate design vignettes in which combinations of materials are used to create aesthetic statements.

This has proved to be a powerful tool. In fact, we've found that even if someone doesn't particularly like the design of a particular vignette, they still respond favorably to seeing materials in context and juxtaposed with one another.

That's especially true when it comes to textures, which has been something of a surprise to us because we originally thought that color combinations would be the most important sensory element. Instead, most comments seem to flow



We trace our corporate origins to 1973 and a bedroom in my parents' home, where I also took my first cracks at figuring out how to install terra cotta tile in the backyard. The 1958 Chevy seen here was our first company vehicle: For many years we rented or leased trucks for our runs to pick up Mexican tile and stone.



in response to seeing *and* touching smooth or highly polished materials set against those with rougher textures or reliefs. As a result, now we almost always try to include textural contrasts in our vignettes.

In a sense, we're taking our cues here from the realm of exterior design, where the contrasts of stone or tile with plants and water lend tremendous appeal to given settings. Beyond this, what we're finding is that, more than ever before, designers are linking indoor and outdoor environments by means of materials. There was a time when exteriors were treated as something completely separate and apart from interiors, but now in many custom homes we're seeing areas in which large windows and doors open fully with stone or tile flooring that flows continuously from "interior" spaces out onto "exterior" decks and patios and watershapes.

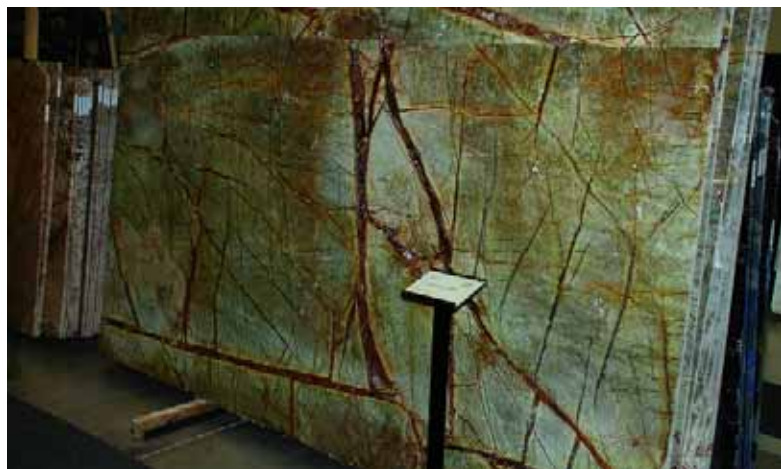
Working with that visual flow, in many situations we've provided designers and builders with stone that might be polished smooth for indoor applications but has a roughened texture outdoors where slip-resistance is a greater concern, especially around watershapes.

That ability to work such transitions is one of the best qualities of many types of stone – a versatility that gives designers and builders a broad set of options. From our perspective, this is all a wonderful breath of fresh air: It's exciting from our perspective to watch as the visual and spatial distinctions between indoors and outdoors are being redefined with complete integration as the design goal.

Again, following this trend has prompted us to think differently about the range of textures we'll stock for certain types of stone. It has also led us to take customization to new levels: In many cases, we're now procuring special pieces from stone suppliers to meet specifications for a single, unique project. (Those situations don't come along every day, but when they do, it's great fun to collaborate on that kind of direct, creative level.)

Ground Up

What's interesting from my perspective is how this creative expansion of the exterior design field tracks back to (and in some ways coincides with) the concept that led to formation of Cactus Stone & Tile more than 35 years ago.



Experience has showed us that helping designers and their clients visualize the possibilities is often the key to advancing the decision-making process, so we've filled both our retail spaces and warehouses with elaborate, museum-style displays that tell stories about what might be done with well-selected materials – alone or in combinations.



When I was 22 back in 1973, I was working in the concrete business and was busy one day installing a deck around a swimming pool. The client was an older gentleman who had a very specific idea how he wanted his finished backyard to look but had been frustrated because he wasn't able to find a specific terracotta floor tile he'd seen in Mexico.

Even then, I knew what his frustration was all about: Although I knew almost nothing about tile, I decided to help him out by trying to find the material.

Enlisting my brother as a companion, I set off in my pickup truck and crossed the border into Mexico at Yuma, Ariz. We started out in San Luis and worked our way southeast to Saltillo, just south of Laredo, Texas. Here we found a terracotta tile with the



unusual reddish-yellow coloration we were after. The locals used an indigenous clay to create their wonderful tiles, but we saw nothing that was a direct match for what our client wanted. After more investigating, we picked up a lead on a tile maker up in the near-by mountains and finally found exactly what we were after.

We had a truckload of the material shipped to us back in Arizona, so it was time for me to learn what I needed to know about installing tile. Starting small, I set up a makeshift “show-room” in my parents’ backyard that consisted of two-by-two foot slabs I used to display the tile. I also made it a habit to follow tile installers around to see how they plied their trade. After a few weeks, I was ready: I finally installed the terracotta tile in my client’s backyard and it looked terrific.

The entire experience taught me several important lessons – about listening to clients’ ideas, about the determination involved in hunting for the right material, about the importance of knowing the physical characteristics of the material and, rewardingly, about how beautiful the right material can look in a proper setting. By 1979, I’d branched out to include a much broader set of products, investing almost every dime of profit in building up the list of what the company had to offer, including our first line of Italian tile.

At that time, I was still acting as a contractor and installing tile on my own. As a result, I ran into some resistance on the part of other contractors who were wary of buying product from a competitor. Those awkward encounters persisted through our first several years in business, but before long I was able to convince the contracting community that we offered the best material available to all comers – and slowly but surely our sales to these contractors began to grow.

It was a very different business environment back in those days: My belief is that if someone tried this same approach today, they wouldn’t get very far.

Setting Sales

One of the things I learned early and in a big way was that when you have product immediately available, your chances of getting it specified are far greater than if you simply show someone a sample and let them know you can track it down for them. With foreign sources, of course, that process of obtaining materials can take many months – a factor that endlessly frustrates homeowners in particular.

This realization led me to develop a purchasing philosophy and methodology that dictates acquiring a chosen product in large enough quantities that the demand can be met in a timely fashion.

That approach of providing a ready stock of available products has informed the entire organization that grew atop the small company I’d started. For years now, we’ve stressed the notion that our efforts must be driven by our ability not only to listen to clients and canvass the world for stone and tile products, but also to anticipate needs and keep product flowing as freely and rapidly as possible.

Frankly, this might be an approach others suppliers use, but I’ve never worked anywhere else so I can’t say that for certain. As I see it, our approach makes what we do all the more enjoyable because gratification comes much more quickly to homeowners and commercial enterprises, making everyone involved more excited and instilling pride of ownership at a much earlier point than usual in the process.

Atop all that, I love the fact that stone and tile have a permanence that other types of products and materials don’t often have. These are products that, in the case of many stone materials, have existed for millions of years already and will last on project sites for generations to come.

We hear much about how disposability is an undesirable quality of our society. In our own small way, we offer an antidote to that impermanence and take seriously our responsibility to offer materials that are worth keeping and enjoying indefinitely.



Level Fun

By Giorgos Eptaimeros



Oregon watershaper Giorgos Eptaimeros has developed a reputation for providing his clients with the full range of exciting aquatic experiences. Always on the lookout for new options to offer and, more specifically, for ways to bring popular commercial and waterpark-type features to his residential projects, he recently turned to a leaping-jet/splash-pad kit to bring a dynamic backyard play feature to a distinctly mid-range project.

When I emigrated from Greece to the United States nearly 20 years ago,

I already had more than a decade of commercial project management experience under my belt. As is the case with many of us who come to this country, I was pursuing greater opportunities – but I never figured I’d end up designing and building swimming pools for a living, nor would I ever have imagined that this new career would find me working on the cutting edge when it comes to providing fun and relaxation to families in my area.

As luck would have it, however, that’s exactly what has happened. My company, Poolworld of Beaverton, Ore., has now been in business more than 16 years, and we currently provide everything from elaborate decorative and interactive water-shapes to custom residential and commercial pools.

In developing our approach to our own residential and commercial watershape designs, we often take cues from the waterparks that are increasingly becoming a destination of choice for American families. The results of our observations have tended to emerge most directly in our commercial projects, basically because of the costs involved in creating elaborate interactive systems. But increasingly, we’ve been encountering middle-class homeowners who are wanting us to help them bring a bit of the waterpark experience to their own suburban backyards.

A desire to meet this need made us take notice when S.R. Smith of nearby Canby, Ore., introduced WetDek, a backyard splash pad. It caught our eye not only for bridging the gap we perceived between waterparks and backyards, but also because we saw it as riding the crest of an important, nationwide recreational trend.



A Good Fit

For years, we've been aware that deck-level, leaping-jet systems are among the most popular of interactive waterfeatures on the commercial front. Not only are these systems a waterpark favorite, but they've also been used to great effect in settings such as outdoor shopping malls as well as various parks and public plazas.

Wherever they appear, these systems seem to serve as social hubs – places where parents can relax as they watch their kids go crazy amid sequences of jumping jets. There's something playful and wonderfully fun about these designs: They offer a level of enjoyment that ranges far beyond what can be achieved with conventional fountains or traditional swimming pools.

The challenge in bringing these interactive systems to the residential mark has always been the complexity of hydraulic design, the difficulty of such installations and the overall system costs. No matter how popular, in other words, these systems always seemed beyond the reach of the majority of our residential clients and were therefore not something we considered offering to more than a select few homeowners.

As we saw it, S.R. Smith had hit the nail on the head with its pre-engineered, pre-packaged system: If it worked out, it would enable us to provide our clients with just the sort of high-level backyard fun they were asking us to offer at a cost that fit many more budgets. Once I learned about this system, I didn't hesitate in wanting to give it a try.

The clients for the project pictured here were a perfect test case. The quintessential American family with two kids and two dogs, they were looking for a way to make their grassy backyard more interesting. They were interested in enlarging their

Our first task on site involved leveling the area in which the pad was to be installed. After clearing away the lawn, we set up a small retaining wall, raised the grade in compacted lifts and then, once we'd reached the desired grade, cut a trench for the system's plumbing and yard drainage.



Next, we installed the pipes and reservoir and also prepared the equipment pad, which included the pump, filter and chlorinator supplied as part of the kit.

patio space as well, and as we spoke, we came to see a deck-level, leaping jet system as a perfect solution.

Before long, we settled on a 12-jet system for this project, deciding against the more compact six- and nine-jet options. The manufacturer provided us with the plumbing schematics, which are presented in a variety of layouts according to the shape of the pad, which in our case was to be a 15-foot circle.

The kit that arrived included all major system components: a pre-programmed, multi-zone controller; four solenoid valves; plumbing connections; a dozen brass nozzles; a four-inch nickel drain with an ABS hub; a three-quarter-horsepower pump; a 25 square-foot sand filter; an in-line chlorinator; and a 150-gallon reservoir.

Everything Ready

The system requires perfectly level ground, and in this case we had to rework the site to create a suitable surface. Access to the space was limited, so we ended up using a walk-behind loader to remove the topsoil and then transport materials to the site to build a small, concrete-block retaining wall that would flank the leveled area.

In addition to the retaining wall and a bit of backfilling, we also installed a site-drainage system. In all, this preparatory work took us two days.

We had already checked with the county's permit office and found (as we suspected) that neither building nor mechanical permits were required with installation of this self-contained unit, so when the time came we just installed and connected the system components. (The only thing the county required was an inspection of the electrical system.)

The kit provided just about everything we needed with the exception of the PVC piping runs, some miscellaneous plumbing fixtures and a valve we decided would be useful in controlling water flow. Once the basic plumbing components had been installed and the electrical system was in place, we made the final connections, filled the reservoir and conducted pressure tests.

The next day (our fourth on site), we installed the brass nozzles at finish grade, then formed, poured and finished a six-inch-thick, reinforced-concrete pad. The 15-foot circle slopes gently from the outer edge to the central drain head.

We used a broom finish on the concrete – smooth enough to be kind to children's feet while still providing good traction.

The quintessential American family with two kids and two dogs, the clients were looking for a way to make their grassy backyard more interesting.



The clients chose a natural concrete stain that made the pad blend visually with the rest of the backyard environment. We later sealed the pad with an acrylic urethane protectant, and the result was a beautiful, textured surface with flush-mounted brass jets and a matching drain cover.

All that remained was a system test: I was given the honor of activating the controller, and it wasn't long before vigorous streams of water were erupting from the surface of the deck.

With this stage complete, I met with the homeowners to teach them how to operate and maintain their new system. I showed them how to fill the tank, clean the filter and operate the controller. They listened patiently, but the little ones weren't quite so cooperative and steadily urged their father to turn the jets on – which, finally, he did.

At the push of a button, the fun began. The first words I heard from his mouth said it all: “Look at the kids: They love it!”

Enduring Excitement

This system represented a whole new project type for us, so I've contacted these clients periodically to see if the initial level of excitement had staying power.

In my most recent conversation with them, they said the kids still loved their splash pad, but something else was happening, too: When the kids weren't there playing, mom and dad were having a good time (in the evening especially) watching the water as a peaceful fountain. And one more thing: “The dogs *love* it,” they said, and seemed to enjoy playing in the water even more than the kids did.

The fun was something we all expected, but finding quieter pleasure in the moving water was something we hadn't anticipated – and their story about the dogs has me thinking about approaching my local dog park to see if there's any interest.

I won't hold my breath on that last possibility, but given how many surprises and professional adventures the watershaping business has provided me since I came to this country nearly two decades ago, I've learned to be ready for almost *anything*.



After precisely positioning the nozzles, we poured a reinforced, six-inch-thick concrete pad with a 15-foot diameter. We then applied a broom finish to the pad (to provide good traction for little feet) and sealed the surface with an acrylic urethane protectant.



Whether it's used as a graceful, arcing fountain or as a center for active children (and pets) at play, this interactive splash pad does a wonderful job in helping us bring waterpark-type features to our clients' backyards.



HOUSE

Among all of David Tisherman's many projects, this one carried him about as far as it could beyond his usual role as a watershaper: Not only did he design and install an impressive pool, but he also partnered in building the house that went along with it. Working in a rich color palette and soaring, eclectic architecture, he crafted a masterpiece of form and reflection and made the house seem to float on the watershape that embraces it.

There's no substitute for working closely with clients. I typically spend many hours conversing with them, discussing everything from their travels and artistic interests to the specifics of the project at hand. It's the only way I know of to ensure that I'm following the best path in developing a design to meet their needs.

That approach was taken to something of an extreme in the project pictured here: Not only did I devise the outdoor spaces, including a large swimming pool and a host of other exterior features, but I also was extensively involved in building the house itself. It was an exciting process for me, one that yielded positive outcomes and that, to this day, is still one of my favorites.

Interestingly, however, my association with these wonderful clients actually began a couple years before this project commenced – an encounter that resulted in no work for me at all and also put me on the outs with a prominent real-estate agent.

WORTH

By David Tisherman

Don't Do It

It all started when the clients, who I did not know at the time, called me to take a look at a property they were considering in southern California's beautiful Santa Monica Canyon. He was a bit reserved, but she and I hit it off immediately and I was genuinely excited by the prospect of working with them.

When we met, he was a producer and she was a gourmet cook. They had a couple kids, and she and the children were crazy about horses. What they wanted most was a parcel that would allow them to have a corral in addition to the house of their dreams – something that would be both spectacular and unique.





The original pool wasn't a good fit with the program we'd developed for the house, but it hung in there until we started framing the house and the homeowners could see clearly just how bad a mismatch it was.

As we walked the five-acre estate, warning bells started ringing in my head. In fact, I didn't like *anything* I saw, including the signs of water damage visible in the pad that had been cut for the existing house. As we kept moving, I grew increasingly concerned about the nature of the soil and the drainage patterns as well as the system of small retaining walls: Everything looked like *trouble*.

I started by letting them know that there was a high probability that simply correcting the drainage issues on the property would cost a small fortune – and that this expense would come with them not having built a thing.

Suffice to say, the real-estate agent was none too happy with my bluntness: Even in the early 1990s when these events took place, this was a multi-million-dollar site and I had just blown a major financial transaction. Had I not spoken up, of course, I might have undertaken an extremely lucrative project – but in all good conscience, I wouldn't sacrifice my credibility and couldn't have moved forward without telling these likeable people exactly what I thought.

To test my visual survey, we brought

in a soils engineer whose preliminary evaluation confirmed that the site was effectively unbuildable without *significant* remediation. The clients, who even at that point were about to enter into escrow on the property, backed out of the deal. I figured that was the end of it: I walked away empty handed, but I knew I'd done the right thing.

Two years later, the clients called me out of the blue and told me that they'd just purchased a property in another wonderful Los Angeles enclave. There was an existing house with a pool, but they wanted to scrape the lot clean and start fresh. At that time, they didn't even have an architect; they were calling me first, they said, because of the trust we'd developed the last time around.

To get things going, I put them in contact with Mark Whipple, an architect I'd worked with previously who seemed to me to have the right personality and vision to be a good fit with these clients. I was right: He came aboard soon after, and we all began a series of discussions in which the basics of the design began to emerge. Then came the surprise: During one of these sessions, the clients asked me if I'd be willing to build the house.

I'm *not* a home builder, but through the years I'd worked with a number of top contractors and immediately called one of my long-time associates, Rick Shevitt, an absolutely brilliant general contractor. For purposes of this job, we formed a separate company and went to work.

Horse Country

As mentioned above, the clients are equestrian enthusiasts. One of the main reasons they'd chosen this particular property had to do with the fact that it was in one of the few areas within the City of Los Angeles zoned for horses. It wasn't a large parcel – just shy of two acres – but even though it was only a short distance north of the noise and traffic of Sunset Boulevard, it had a distinct feeling of being out in the country.

The clients had never lost their desire for something spectacular and unique, so the design phase for the house extended over several months. Whipple handled the lion's share of the architectural-design chores, but it truly was a committee project with the clients and my ad-hoc partner and I participating fully. At some point in the process, the



We removed the old pool and then had to figure out a way to tuck the new pool slightly under the house to give the impression that the building was floating on the water. This involved the laborious saw-cutting of the foundation in all areas where the water was to interface directly with the house, then chipping away the concrete to prepare for insertion of the pool shell. We finished the shell, then waited as a magnificent structure took shape above it.





clients decided to accelerate things a bit by declaring that the existing pool would stay and that we should focus all of our energies on the house.

The existing pool was an eyesore, but for several months after the clients had made their decision, I put it out of mind and stopped seeing a new watershape as an integral part of the project.

The design for the residence that ultimately emerged was a mélange of influences—part Legorreta, part Barragan, part Le Corbusier—with a distinctly Moroccan flavor stirred into the brew. Everything was to be modular and rectilinear, with wide-open interior spaces under lofty ceilings, and we all looked forward to the incredible light that would pour through the large windows and glass doors that were to wrap the building.

Where the play of light and shadows was to be the key in establishing the interior atmosphere, we also knew that colors would make a particularly strong contribution: Walls throughout were to be finished in beautifully mottled plaster in warm, rich earth tones, while the flooring consisted of seven-inch

The horse trough that flanks the approach to the front door introduces the homeowners and their guests to the prominence of water in the architectural composition. From inside, this waterfeature takes on added visual significance with an intriguing spillway that seems to flow onto the ground.





pecan planks through most of the home and of finished concrete inlaid with tile details in the kitchen and entry hall. The home's geometry might have seemed a bit severe, but the juxtaposed colors, textures and materials were selected to give the spaces an exceptionally warm, comfortable feeling.

We also went to great lengths to link the interiors visually with the exteriors. Colors from the inside flow to the outside, walls from the inside push through the framing to become exterior walls, and we placed windows strategically to take advantage of the best available views. Our ambition, in short, was to make the entire lot feel as though it was part of the home.

Nothing happened quickly: Every single detail was discussed



Much of the light, airy exterior program was driven by design decisions made inside the house, where there was a steady focus on bringing natural light indoors from every conceivable angle. As you move through these spaces, you eventually become aware that there's a big body of water in the backyard – and that it reaches right up to the house.



We focused on making the exterior's architectural features align closely with the style of the home and its interior. Even the monoliths that line a garden path have the same sort of undercut lighting apertures we used inside – a remarkable path-lighting effect indoors or out.



and considered at great length; we made countless sample boards to aid in the selection of colors and materials; and we mixed dozens of custom plaster colors in ochre, beige, coral and more by adding various oxides to cement.

The entire process was wonderfully fun – a time of almost white-hot creativity in which the words “standard,” “typical” and “common” never came into use, not once. Even the gravel we ended up using outside in the corral area was sourced in Mississippi and was chosen for a beautiful salmon color that worked perfectly with the color of the house.

Good Forms

Happily, and in stark contrast to the first property I’d visited with these clients, the new site was blessed with wonderfully stable alluvial soil. It was part of an ancient riverbed, and the soil consisted of layers of sand and stone – extremely sturdy, which meant we didn’t have to do anything to prepare the ground and could just jump in to build the home’s foundation.

As we dug, however, we encountered a few veins of expansive clay; not taking any chances (and acting on the advice of soils experts and structural engineers), we extended the foundation down a foot beyond the requirements of the original plan. As it turned out, that was a fateful decision – as we’ll see just below.

We were well into the framing stage for the house when Shevitt told me that the clients had decided to rip out the old pool after all and replace it with a new one. Moreover, they had also decided that they wanted the new watershape to exist as a unified visual element with the house – meaning specifically that they wanted the walls of one part of the house to reach straight down into the pool.

The only problem: The home’s foundations had already been built.

The usual pool-guy approach under these circumstances would have been simply to abut the pool’s shell to the foundation, creating a visually awkward eight-to 12-inch bond beam and most likely failing to consider the relationship between the two structures and the surcharges one would impose on the other. That certainly wasn’t an approach a structural engineer would have endorsed – and was absolutely *not* what the clients had in mind.

Instead, they wanted the pool to appear as though it was an integral part of the home itself – that, in fact, the wall of the house and the pool below it would be on the same, seamless vertical plane. And this was definitely the right call, aesthetically speaking: Conjoining the pool and the house in that way would create wonderful reflections and would also make the house seem to float on the water’s surface.

Without considering all of the con-

struction-related implications of what we were doing, the pool we devised was a sort of elongated mushroom shape that was to flow right up to three of the home’s exterior walls and then reach some 65 feet into the backyard.

We all knew it would be visually spectacular from multiple vantage points inside the house and around the property. What we weren’t immediately sure of is how we would make it all work.

Fortunately, I had built the home’s footings myself, so I knew exactly what was there. Armed with that information, I put together a plan and contacted the structural engineer for confirmation.

What I’d proposed was sacrificing some of the existing 14-inch-wide, four-foot-deep footing to accommodate the pool shell. As luck would have it, both the width and the extra depth we’d added to the footings gave us what we needed. The engineer agreed with my approach, told us what to include by way of steel reinforcement and gave us the clearance we needed to move forward.

Close Quarters

This revision called on us to saw and chip away four inches of the face of the stem wall that made up the house’s footing and place steel for the pool shell in the void we’d be creating. Then we would shoot right up against the concrete footing, in effect creating a struc-

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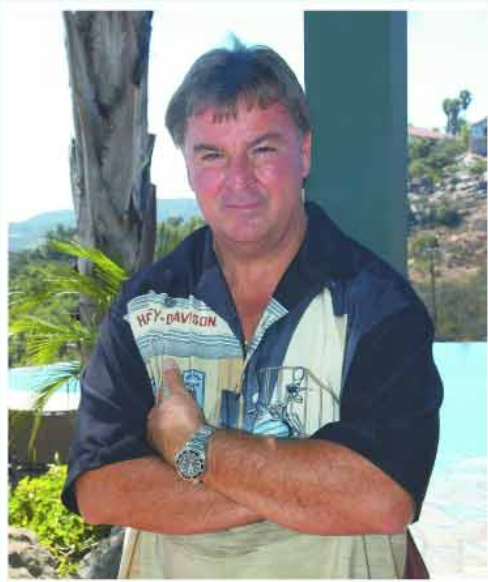
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tural notch that let us make the shell an integrated part of the foundation.

It was quite an elegant solution: We installed the steel against the house's footing, then shot the shell right against it until the interior surfaces of the pool were just flush with the exterior walls of the house. In effect, we cantilevered a part of the house over the space where the pool shell was to go.

Although this all was relatively simple in concept, actually executing the detail required extreme precision, and we spent an amazing amount of time measuring and remeasuring everything to achieve what amounted to zero tolerance. Think about it: We had to build the shell so that the finished plaster and tile surfaces would form an unbroken visual plane with the finished surface of the house, and there was absolutely no margin for error if we wanted to make the house seem to float on the water. Moreover, we had to get it right the first time or the

whole thing would've turned into an expensive disaster.

It all worked out, and with all of these key problems solved, the rest of the swimming pool project was simply a matter of generating sets of details that would make everything work, both functionally and visually. One key detail, for instance, had to do with steps we inserted along the walls adjacent to the home: We wanted anyone inside the house to have easy access to the water through all of the doors and windows that opened on the walls above the pool.

Another major detail: On the far side of the pool over the deep end, the owners wanted a diving board. I truly hate the way typical diving boards look, so we developed yet another architectural detail and mounted the board in a circular structure that ties perfectly into the style of the house. Beyond the board, we also installed a fire pit and, behind that, an artist's studio – everything designed to serve as visual extensions of the look of the main house.

By the house, the pool was to flow up to numerous sets of oversized pocket and accordion-style doors. Off the kitchen and dining room, we craned a nine-by-five-foot stone pad into place to connect the two spaces: When the doors are open, the water is right at your feet. (I've been told that the kids love to sit on the edge of the kitchen, dangling their feet in the water as they eat lunch. It's a rare situation in which water *truly* becomes

part of a living space!)

Off one arc of the pool, we built an outdoor shower structure consistent with the architectural program. In front of that structure, we placed a series of one-foot-square fire pits, set just a foot back from the edge of the pool. This proved to be a great detail – one of my enduring favorites: At night, these small points of firelight conjure spectacular reflections in the water that are visible from several spots inside the house.

The decking is concrete with a rough, aged-looking finish. This aligns visually (and seamlessly) with the simple, poured-in-place concrete coping and with sections of the flooring inside the house. We also set up diamond-shaped areas in which we inlaid handmade ceramic tile for visual interest – another outdoor echo of an indoor treatment. Finally, there's the barbecue area, which has a design that again is directly aligned with the home's style.



The triumph of this fully integrated design is seen most readily in the reflections of the home off the water and in the way the building seems to float over its glassy surface – especially after dark.



Beyond the Pool

Everywhere on the property, inside and out, we executed the design program with extreme attention to detail. The front gate, for example, is a steel structure with a checkerboard pattern that enables visitors to see through portions of the barrier as they approach. Even the mailbox is housed in a suitable rectilinear column.

A good bit of space is devoted to the corral and stables, all of it uncluttered and clean and in visual accord with the home's architecture. The corral's fence, for example, consists of simple steel posts that appear to be stuck unceremoniously in the ground.

One of my very favorite details is the long, rectilinear horse trough. This was Rick Shevitt's work, and he designed it with beautiful spillover details on each end – basically a pair of small vanishing edges that appear to spill onto the ground. This trough is visible from one side of the house and is striking for its

disarming simplicity. It's a beautiful waterfeature that just happens to provide fresh water for the horses.

The result of all of this detailing is a property characterized by complete and total visual continuity: *Nothing* looks out of place.

In visiting the property once our work was done, however, I was struck most by the reflections. We went with a dark-gray plaster finish for the pool's interior, and it effectively turns the entire water surface into a giant mirror. From inside the home, you see reflections of the surrounding trees, landscape and structures; looking back toward the home, the architecture is reflected on the water's surface in a way that reinforces the sense that the house is floating atop the pool.

At night especially, with the home lit up and the fire pits in operation, the reflections are wonderfully warm, inviting and beautiful, softening the starkly linear architecture and bringing fresh at-

tention to the colors and textures that mark the scene.

This project is a perfect expression of the approach to watershaping I've always used. As I have said and written many times in the past 30 years, water is a colorless, odorless, amorphous, highly reflective material that enhances a setting and acts as a supporting element that duplicates the environment. In doing so, it changes the spectral palette and sets up subtle contrasts of line, detail and volume.

As such, a watershape should always be a coordinated part of (and never separate from) its environment. Yes, a watershape can be a focal point in a setting, but it should never take center stage and always serves the best purpose when it exists in proper scale and proportion and supports the architecture and space that surround it. On those occasions, watershaping becomes an art form – precisely the aspiration we all had for this project.



ACRYLIC PANELS

Circle 135 on Reader Service Card



REYNOLDS POLYMER TECHNOLOGY offers R-Cast acrylic panels for swimming pools. Designed for strength and durability, the panels can be bonded and formed into almost any shape or size. The optically clear material creates outstanding vanishing-edge effects, is unaffected by direct sunlight and has 17 times more impact resistance than glass. **Reynolds Polymer Technology**, Grand Junction, CO.

WATERFALL PUMP

Circle 136 on Reader Service Card



PENTAIR WATER COMMERCIAL POOL & AQUATICS announces availability of a lightweight, all-plastic EQ Series commercial pump that's ideal for waterfall applications. The high-performance, low-noise, 5-hp pump has a 1,750 rpm motor that achieves flow rates up to 650 gpm and has closed impellers for longer motor life even under the stress of higher loads. **Pentair Water Commercial Pool & Aquatics**, Sanford, NC.

FIRE FEATURES

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GRAND EFFECTS offers combination fire and water pieces that combine great decorative beauty with functional sources of light and heat. Made of either concrete (in five finish styles) or copper, all are designed for durability, low water flow (10 to 12 gpm) and long-term performance. They also come with either automated or manual ignitions and work with home- or pool-automation systems. **Grand Effects**, Irvine, CA.

BACKYARD WATERPARKS

Circle 138 on Reader Service Card



COOL BLUE OASIS offers equipment for backyard waterparks. Intended either as stand-alone splash pads for clients who want nothing more than interactive water-features in their backyards or as integral parts of larger backyard pool complexes, the line includes a range of jet systems as well as rainwater-collection and renewable-energy options – all designed for easy installation. **Cool Blue Oasis**, Wooster, OH.

DECORATIVE FIXTURES

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POOL JEWELS offers a line of fixtures designed to enhance pools, spas and their surroundings. Products include deck rings that come in four styles and five colors; deck medallions in four styles, all with antique pewter finishes; collars for pool-cover anchors in three styles, all with natural brass finishes; rail goods in stainless steel and available in custom colors and finishes; and anchored umbrella stands. **Pool Jewels**, Douglas, MI.

WINDOW WALLS

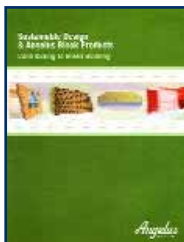
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NANA WALL SYSTEMS introduces NanaWall, an operable glass-wall system that gives homeowners constant options for weathertight comfort or open-air living. The walls are available in standard and custom sizes and configurations and open easily to make any indoor/outdoor boundaries vanish. The panels come with wood, aluminum or clad frames in hundreds of colors and finishes. **Nana Wall Systems**, Mill Valley, CA.

SUSTAINABLE-DESIGN LITERATURE

Circle 141 on Reader Service Card



ANGELUS BLOCK CO. has published literature on use of its concrete masonry units and interlocking concrete-pavement products as part of efficiently "green," sustainable designs. The 20-page, full-color booklet defines the benefits of a green approach and covers drainage and stormwater-control as well as energy optimization, material reuse, regional sourcing and acoustic performance.

Angelus Block Co., Orange, CA.

FENCE LINE

Circle 142 on Reader Service Card



EVOLUTION FENCE CO. has expanded its line of ornamental, powder-coated aluminum fencing to include three appearance options: oval, classic and heavy-duty. Each is constructed with varying levels of picket thickness as well as mid and bottom rail specifications and uses the unique Fusion-Loc system that joins fence pickets to rails (and assembled panels to posts) firmly, without screws. **Evolution Fence Co.**, Hauppauge, NY.

GROUNDING SYSTEM

Circle 143 on Reader Service Card



FCI-BURNDY offers Gridmax Equipotential Bonding Grid, an electrical grounding system for watershape applications. The system, which covers all points around the contours of pools and associated decks to manage any stray currents, is made with a high-copper alloy mesh that can be connected together using either mechanical, compression or exothermic products, depending upon site specifics. **FCI-Burndy**, Manchester, NH.

HEAT PUMP

Circle 145 on Reader Service Card



PENTAIR WATER POOL & SPA has introduced UltraTemp, a cost-efficient heat pump for pools that minimizes energy use while prolonging the swimming season and meeting rules requiring use of non-ozone-depleting refrigerants by 2010. Other features include an efficient, reliable and quieter compressor; a titanium heat exchanger; and a performance-enhancing sensor array. **Pentair Water Pool & Spa**, Sanford, NC.

WATERFEATURE PUMPS

Circle 147 on Reader Service Card



ATLANTIC WATER GARDENS has added new pumps to its TidalWave line, which now includes four models with flow rates ranging from 2,800 to 5,950 gph. Designed for dependability, the lightweight units feature steel/composite construction, dual silicon carbide mechanical seals, screened pump intakes and vortex impellers as well as thermal-overload protection. **Atlantic Water Gardens**, Mantua, OH.

RISK-MANAGEMENT HANDBOOK

Circle 144 on Reader Service Card

NATIONAL SWIMMING POOL FOUNDATION has published its Aquatic Risk Management (ARM) Handbook. Written to help pool and spa managers and operators through the process of reducing injury and liability risks related to personal or property losses, it's of use to any aquatic designer, engineer or builder who participates in developing these facilities. **National Swimming Pool Foundation**, Colorado Springs, CO.



RAINWATER HARVESTING

Circle 146 on Reader Service Card

AQUASCAPE has introduced RainXchange, a system for capturing, filtering and reusing rainwater. Combining a recirculating, decorative waterfeature with a subsurface rainwater harvest/storage vault, the system stores runoff and filters the flow from downspouts for future use in the waterfeature or for irrigation. There's also a specification calculator that assists in properly sizing the system. **Aquascape**, St. Charles, IL.



POOL-WALL FORMS

Circle 148 on Reader Service Card

FRANK WALL ENTERPRISES has introduced AquaForms, an aluminum pool-forming system designed for concrete-wall vinyl-liner pools and all other concrete pools. The modular forms are easy to clean and can be used more than 2,500 times in forming pools of all shapes and depths. They allow for various steps, benches, swim outs, multi-level decks, raised walls and more. **Frank Wall Enterprises**, Columbus, MS.



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AIR QUALITY MANAGER

Circle 149 on Reader Service Card



ACU-TROL has introduced an Automated Air Quality Management (AAQM) System that offers continuous monitoring of the combined chlorine levels of indoor pool environments and helps facility managers eliminate chloramine odors and eye and skin irritation. The system communicates directly with the building's air handling unit to vary the amount of outside air brought indoors. **Acu-Trol**, Auburn, CA.

GROTTO/SLIDE SYSTEM

Circle 150 on Reader Service Card

REPLICATIONS UNLIMITED has introduced a rock-grotto system that includes both a waterfeature and a slide. Made from a lightweight, composite urethane polymer to resemble the natural forms of different stone materials, the composition comes factory-made, is designed to mount to existing decking (so no foundation is required) and arrives on site ready for installation. **Replications Unlimited**, Hazelwood, MO.



LANDSCAPE WELL LIGHTS

Circle 151 on Reader Service Card



ORBIT/EVERGREEN has introduced the FG Series of 12-volt well lights with adjustable, tilting lamps. Designed for placement in landscapes to illuminate trees, fountains, arbors or other garden features, the line includes five models with covers (in full-view, louvered, vandal-resistant and round- or square-hood styles) that direct the light from the 4-3/4-inch wide by 4 -1/2-inch deep fixtures. **Orbit/Evergreen**, Los Angeles, CA.

CHANNEL-DRAIN COUPLINGS

Circle 152 on Reader Service Card

NDS has added new drainage solutions to the company's Dura Slope channel-drain system in the form of radius couplings. A lightweight yet durable alternative to polymer concrete products, the new components snap into place for effortless installation of continuous bends and curves and provide an easy-to-install solution for any curved application around a patio, fountain, pool or spa. **NDS**, Woodland Hills, CA.



COMPOSITE FENCING

Circle 153 on Reader Service Card

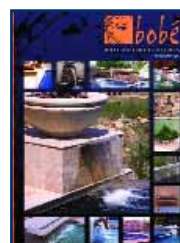


FIBER COMPOSITES has expanded its Fiberon line of composite decking, railings and fences with the addition of Enclave fencing products. Combining subtle wood-tone colorations with heavy embossing, the materials fit into outdoor spaces with depth, texture, flexibility and long-lasting beauty in three natural-looking wood hues: Coastal Cedar, Pacific Redwood and Weathered Pine. **Fiber Composites**, New London, NC.

WATER/FIRE CATALOG

Circle 154 on Reader Service Card

BOBÉ WATER & FIRE FEATURES has published a catalog on its lines of waterfeatures, fire features and landscape products. The 78-page, full-color booklet covers a variety of scuppers, overflowing pots and spillways (all made of copper and stainless steel and available in eight colors); combined water/fire features; fire pit inserts and systems; and planters and column caps. **Bobé Water & Fire Features**, Phoenix, AZ.



DECK COATINGS

Circle 155 on Reader Service Card



KELLEY TECHNICAL COATINGS offers Patio Tones, a deck coating/concrete-restoration system. Designed to revive the good looks of plain or worn concrete and patterned-concrete surfaces, the material rolls on easily to protect a repaired, clean deck and comes in eight colors: Ivory, Champagne, Cream Peach, Coral, Desert Sun, Sand Valley, Smoky Blue and Creekstone. **Kelley Technical Coatings**, Louisville, KY.

ROTATING RETURN JET

Circle 156 on Reader Service Card

ADVANCED SPA-AGE SYSTEMS & ENGINEERING TECHNOLOGIES offers The Circulator, a 360-degree, rotating water jet that screws into an existing wall return and eliminates "dead spots" by automatically enhancing the circulation system's ability to distribute chemicals, equalize water temperatures and clear away cloudiness. **Advanced Space-age Systems & Engineering Technologies**, Saint Pete Beach, FL.



MISSING ANY?

❑ February 1999 (Vol. 1, No. 1)

Tisherman on working in difficult soils; White on edge treatments; Lacher on expansive soils.

❑ June 1999 (Vol. 1, No. 3)

Phillips on water and decks; Parmelee & Schick on soils and geology; Anderson on water sounds.

❑ August 1999 (Vol. 1, No. 4)

Anderson on stream design; Adams on community waterparks; Gutai on spa hydraulics.

❑ October 1999 (Vol. 1, No. 5)

Holden on aquatic-design history; Mitovich on dry-deck fountains; Tisherman on site geometry.

❑ December 1999 (Vol. 1, No. 6)

Finley on Japanese gardens; a roundtable on pools and landscape design; West on color rendering.

❑ February 2000 (Vol. 2, No. 2)

Hersman on lighting design; Macaire on faux-rock installations; Andrews on glass mosaics.

❑ March 2000 (Vol. 2, No. 3)

L'Heureux on project management; Long on steel cages; Forni on installing and maintaining lakes.

❑ April/May 2000 (Vol. 2, No. 4)

Schwartz on garden access; Anderson on streambeds; Nantz on watershapes and architecture.

❑ September 2000 (Vol. 2, No. 7)

Davitt on designing for small spaces; Altvater on the importance of aeration; Hetzner on sheet falls.

❑ November/December 2000 (Vol. 2, No. 9)

Arahuate on John Lautner; L'Heureux on stretching laminar flows; Benedetti on satellite surveying.

❑ January/February 2001 (Vol. 3, No. 1)

Holden on a retro look design (II); Fleming on passive approaches; Gutai on working technology.

❑ March 2001 (Vol. 3, No. 2)

Holden on a retro look design (I); Fleming on passive approaches; Gutai on working technology.

❑ October 2001 (Vol. 3, No. 8)

Tisherman on hilltop views; Hagen on natural stream work; Schwartz on classic stonework (III).

❑ November/December 2001 (Vol. 3, No. 9)

Straub on Kansas City's fountains; McCloskey on the Getty Center; Tisherman on Fallingwater.

❑ January 2002 (Vol. 4, No. 1)

Phillips on Hearst Castle's watershapes; Bower on the Raleigh Hotel pool; Roth on Katsura Rikyu.

❑ February 2002 (Vol. 4, No. 2)

Marosz on project integration; Moneta on spa-edge details; Affleck on sculpture and water.

❑ May 2002 (Vol. 4, No. 5)

Anderson on pond essentials; Pasotti on interactive waterplay; Gibbons on 'stellar' fiber optics.

❑ June 2002 (Vol. 4, No. 6)

Altorio on civic fountains; Gutai on skimmers; Beard on working with landscape architects.

❑ September 2002 (Vol. 4, No. 8)

Rosenberg & Herman on site-sensitive design; Dirschmidt on long-term design; Gutai on filters.

❑ October 2002 (Vol. 4, No. 9)

Copley & Wolff on modernizing fountains; Bethune on imitating nature; Tisherman on edgy colors.

❑ November/December 2002 (Vol. 4, No. 10)

Holden on Villa d'Este; Hobbs on Maya Lin's watershapes; Phillips on water in transit.

❑ January 2003 (Vol. 5, No. 1)

Fleming on high-end ambitions; Harris on decorative interior finishes; Gutai on surge tanks.

❑ February 2003 (Vol. 5, No. 2)

The Beards on collaboration; Yavitz on custom vinyl floorings; Mitovich on Microsoft's campus.

❑ May 2003 (Vol. 5, No. 5)

Holden on a retro look design (I); Fleming on passive approaches; Gutai on working technology.

❑ November 2003 (Vol. 5, No. 11)

Holden on carved stone; Shaw on roles of consultants; Forni on period-sensitive renovation.

❑ December 2003 (Vol. 5, No. 12)

Five-year article and topic indexes; five-year index for all columns, 1999-2003.

❑ January 2004 (Vol. 6, No. 1)

Ruddy on enclosures; Lacher on steel and concrete; Forni on water quality for natural watershapes.

❑ February 2004 (Vol. 6, No. 2)

Varick on nature and architecture; Benedetti on protecting stone; Kaiser on grand-scale watershapes.

❑ March 2004 (Vol. 6, No. 3)

Morris on kinetic sculpture; Cattano on collaboration; Heddon on water and settings for healing.

❑ May 2004 (Vol. 6, No. 5)

Rowley on main-drain safety; Ewen on purposeful restoration; Dallons on high-wire watershaping.

❑ June 2004 (Vol. 6, No. 6)

Dallons on a hilltop treasure; Mitovich on the D-Day Memorial; Slawson on Japanese inspiration.

❑ July 2004 (Vol. 6, No. 7)

Benedetti on fortifying concrete; Shaw on fountain 'standards'; Holden on Italy's watershapes.

❑ August 2004 (Vol. 6, No. 8)

Bravo on Olympic-scale restoration; Martin & Tester on water and music; Jauregui on clients and styles.

❑ September 2004 (Vol. 6, No. 9)

Abaldo on a grand-scale vision; Gutai on valves; Lennox Moyer on principles of lighting water.

❑ October 2004 (Vol. 6, No. 10)

dGiacomo & Holden on waterfaring's role; Allen on 'quiet' spaces; Groszowski on a water history.

❑ November 2004 (Vol. 6, No. 11)

Holden on a retro look design (I); Fleming on passive approaches; Gutai on working technology.

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WATER SHAPES

By Mike Farley

Designing in Style

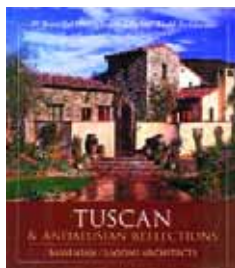
There was a time not long ago when most of my clients wanted swimming pool environments that were designed to suit a design theme of some sort that was separate and distinct from the house. It wasn't unusual, for example, for clients here in Texas to ask for outdoor areas that replicated Rocky Mountain settings or tropical lagoons.

Those projects still come along from time to time, but in the past few years, increasing numbers of my clients want exterior designs that clearly relate to the architecture of their homes.

In part, this has to do with the trend toward smaller and smaller yards in which a swimming pool stands directly adjacent to the home or is even an integral part of it in one way or another. But I've also seen this desire for stylistic harmony and integrity on larger lots where creating a separate, themed environment might have been possible were it not for the homeowners' insistence on architectural authenticity throughout the space.

I studied landscape architecture in college, but my familiarity with different architectural styles was never extensive. To fill the gaps, I've had to seek out sources that provide me with inspiration as well as specific details I can use in devising my own swimming pool and landscape designs. The three books highlighted here are prime examples of the sorts of resources I've found to help me understand the styles my clients want.

Perhaps the most common of all requested "looks" these days come from clients who want their pools to fit in with homes styled after originals found in the Tuscany region of Italy. Trouble is, some things labeled "Tuscan" these days actually have little to do with anything you might actually find there. (In fact, this style already has the same sort of vagueness it took the Spanish Colonial style *generations* to achieve!)

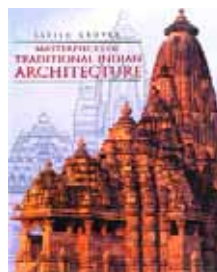


In a quest for authenticity, I pulled down two volumes written and self-published by designers from Bassenian/Lagoni Architects: *Tuscan & Andalusian Reflections* (2005) and *Homes and Courtyards* (2007). In both cases,

these 180-page, beautifully illustrated books offer case studies of the firm's own numerous projects and include photographs as well as concept drawings, site plans, floor plans and scores of specific details.

The former volume covers large projects and the latter more intimate spaces: In both cases, the work provides a useful guide to authentic Tuscan detailing. In particular, I found the information on handling elevations,

colors, materials and planted areas extremely helpful, and I truly appreciated the details on specific architectural touches.



In a different vein, I recently began working on a multi-acre parcel for an Indian client who is pursuing a home and landscape based on Hindu and Islamic influences. This is completely new territory to me (although

I'd recognize the Taj Mahal), so I picked up a copy of *Masterpieces of Traditional Indian Architecture* by Satish Grover (Roli, 2004).

To say the book was an eye-opener is something of an understatement. At 144 pages, this wonderfully illustrated text provides detailed descriptions of 14 classic Indian buildings and their environments, and I am amazed by all the details there are to see. I was definitely impressed by the use of domes, for example, and in observing the ways these designers arranged arches, rectilinear forms and carved surfaces to engage observers and guide their perception of structures and surroundings.

Certainly, there are scores of similar resources for these and other popular styles. As I see it, anything that helps me understand basic design principles and gives me an ability to visualize how I can apply them in my own work has value. I've turned to these three in just the past month and have my eyes open for others to meet the emerging demand for spaces that are true to the grand traditions of art and architecture from around the world. **WS**

Mike Farley is a landscape architect with more than 20 years of experience and is currently a designer/project manager for Claffey Pools in Southlake, Texas. A graduate of Genesis 3's Level I Design School, he holds a degree in landscape architecture from Texas Tech University and has worked as a water-shaper in both California and Texas.



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