94 X G O V E R N O R S P O I N T

2



Preserving Natures Legacy Through Collaboration

Project Summary

Governors Point stands as a testament to the resilience of nature amidst the complexities of human development. Once slated for 300+ homes and multiple marinas, this 125-acre sanctuary nestled in Bellingham, Washington, has endured a tumultuous history marked by proposed housing developments and environmental challenges. However, a transformative partnership between design entrepreneur Randy Bishop and the Whatcom Land Trust has reshaped its destiny.

In 2018, Randy Bishop, a Vancouver businessman and co-founder of the design firm Bocci (www.bocci.com), acquired the land with a fresh perspective. In a landmark agreement, Bishop, in conjunction with the Whatcom Land Trust, committed to conserving the majority of Governors Point. This initiative involved dedicating 98 acres of the 125-acre land to create a nature reserve with limited public access via a loop trail and self-propelled watercraft, while the remaining 27 acres on the western waterfront were designated for the development of 16 1.5-acre homesites.

Rich Bowers, Executive Director of the Whatcom Land Trust, sees this as a fulfillment of a decades-long conservation dream, signifying a major step forward in preserving the natural beauty of Whatcom County for residents and wildlife alike.

Bishop engaged his long-time partner and celebrated architect Omer Arbel with a brief (Arbel's 94th design project) to create a project of modest homes nestled and woven into the natural tapestry of forest and marine coastline. Perfect pieces of architecture sensitively integrated into the surrounding nature reserve and oceanfront was the goal, along with a mission to respect the active and longstanding kayak route along its shoreline.

As part of the vision, Bishop limited the home sizes to 2900 sq/ft with the specific intention of excluding a McMansion mentality common with large waterfront parcels of land. Other ecological imperatives were placed on the deeds: limitations on non-native landscaping, restrictions on constructed wood stairs to the waterfront, and restrictions on chemical landscaping products, to name a few.

















94.1

Project Summary

94.1 is the first of a series of 16 residences (94.1-94.16) on an oceanfront enclave in the American Pacific Northwest. Arbel envisioned a method of tumbling cedar burl offcuts (a high-quality local logging industry waste product) to create numerous boulder-shaped modules ranging in size from 150 – 350mm. These cedar boulders are then mounted to metal standoffs on the cliff facing west-facade to create a cloudlike building envelope. This suspended wooden skin creates a kinetic performance as the cedar gently knocks and sways alongside their forested surroundings. Over time, mosses and lichens will grow on the wood boulders, creating a living veil.

In contrast, the east facade of the house is buried, allowing the forest to extend up over the roof to the cliff's edge. Entry is through a discreet path set between retaining walls, contrasting the experience of entering a cavernous underground space to the sudden discovery of being suspended over the cliff's edge.









































Bocci and OAO

Project Summary

Nineteen years ago, Omer Arbel and Randy Bishop embarked on a journey that would intertwine two distinct yet complementary ventures: Bocci and Omer Arbel Office (OAO). Bocci, renowned for its pioneering work in glass and manufacturing, has become a global leader in innovative design. Over the years, it has evolved into a globally recognized brand synonymous with sophistication and innovation.

On the other hand, OAO has cultivated its expertise in the architectural sphere and is known for its dynamic approach to design and materials research. As time progressed, the boundaries between Bocci and OAO dissolved, with their practices seamlessly merging into one another.

This evolution allows for seamlessly integrating Bocci's luxurious finishes and refined aesthetics into OAO's architectural projects. This dissolution of boundaries transcends conventional limitations, transforming each OAO project into a bespoke masterpiece.

A deep respect for materials and craftsmanship is at the heart of their work. Bocci and OAO's habitations are intricately connected to the essence of their manufacturing processes. From the meticulous selection of materials to the seamless fusion of form and function - they are vibrant narratives of innovation and artistry, inviting inhabitants to embark on a journey of discovery and inspiration.





























By Glenn Adamson

Arbel is a design polymath. He works in clay, glass, metal, concrete, wax, and many other materials besides. What unites his practice is not medium, function, or even scale, but rather a general approach which can be described as parametric. Rather than setting out a defined objective – one that could be drawn and executed – Arbel instead devises a set of constraints, within which the making happens. In effect, his designs are more like verbs than nouns, operations which can be run on different materials in different contexts. The core "recipe" produces something new every time. Though infinite in variation, every potential outcome, every occurrence, is considered equally valid as an expression of the design.

Project 75.9 is a quintessential example of parametric design in action. Within this poured concrete building system, every column will differ, but only within certain channels of possibility. Each fold is a unique convergence of combined factors: prevailing temperature and humidity, the exact mix of the concrete, the tautness of the fabric, the physical action of the operator. The column's flutes are therefore unrepeatable gestures, like brushstrokes in expressionist painting, but at grand scale.

The parameters that Arbel defines may be physical, technical, dimensional, or atmospheric, depending on the procedures involved. They are also, necessarily, conceptual. In his way of doing things, a given design has a status like a Platonic Form – it is an ideal to which actual objects aspire, but can never reach. This helps to explain why he refers to his projects by number, rather than title. Holding two apples in two hands is not grasping the number two itself. Similarly, any number of 84's – Arbel's vessels of copper mesh, enclosed in glass – do not exhaust or even materialize the premises by which they are created. Project 84 certainly can be described. It is a series of steps: crumple the mesh in a specific way, heat it, serially dip it in molten glass, anneal it, allow it to cool, then cut through the top to reveal it in cross-section. It is also a specific technical system: the glass that Arbel uses for the 84 must have the same co-efficient of heat expansion as copper, so that the two materials can be worked together without exploding. Yet as an idea, the 84 remains ineffable, a potentiality, an abstraction.

To some extent, this way of thinking is quite familiar. Anyone who has opened a cookbook knows that the relationship between a recipe and an actual meal is inexact. Arbel's parametric projects could also be likened to theatrical scripts, or musical scores; indeed, his designs are quite literally "performed" by his technical team. But there is an important difference between parametric thinking and the logic of a kitchen recipe, dramatic script, or orchestral score. This has to do with the mathematical and material variables at work, which can be calculated and recalculated to produce varying results, and the intentionally open nature of the outcome. The point is not to approach the parameter – as one might try to recreate a memory of grandma's chicken soup, or render a Beethoven symphony precisely as he intended it to be played. Rather, the goal is to generate purposeful unpredictability, to arrive at forms that could not be imagined in the mind's eye. Arbel sets his rules, observes what happens, then iterates, seeking an ever-expanding diversity rather than convergence toward a norm.

Arbel is certainly not the only designer working in this way. Indeed, some of the most exciting recent achievements in the field have been developed through parametric thinking. A well-known example is Joris Laarman's Bone series of furniture. Laarman specified a given seat and back shape, and a set of material conditions, then ran an algorithm to find the ideal structure to bear the sitter's weight. This digital calculation process yielded a result that looks quite similar to a human skeleton, or the branches of a tree – the laws of evolutionary efficiency independently rediscovered by a machine. The Chilean design collaborative GT2P (short for "Good Things To People") have also adopted parametrics in their work, for example in their use of varying temperature curves to fire locally-resourced lava glazes on ceramic. And parametric design has also had an important role in architecture, ever since figures like Fran Gehry, Greg Lynn, and Zaha Hadid began using digital tools in the 1990s. In the past few years, the technique of mass-customization according to parametric cascades – slightly adjusting the metrics of each individual component – has been mastered by offices like ShoP Architects and the Japanese firm SANAA.

Arbel shares certain concerns with these other designers, but his approach to parametrics is distinguished in two ways from that of like-minded peers. First, they tend to employ the technique in a goal-oriented manner, not an ongoing experimental situation. Laarman's algorithms for his Bone furniture yielded many designs, almost all of which were rejected; only a handful were chosen and then optimized. Similarly, when ShoP Architects used parametrics to design their Barlcay Center in Brooklyn, they did so as a means of engineering the carapace of a previously established structural form. This contrasts with Arbel's approach, which is more openly generative and permissive, accommodating considerable variation. By Glenn Adamson

This correlates strongly to a second distinctive aspect to his deployment of parametrics: his unusual emphasis on analogue processes, often with a basis in craft, which of course always carries with it a propensity toward uniqueness. As my brief foregoing overview of parametric design suggests, most architects and designers (GT2P excepted) associate the methodology exclusively with digital design tools. For Arbel, however, it is a way of reviewing and rethinking the whole history of production technology. His objects are sometimes extremely basic, even purposefully primitive.

For example, the 64 is a candle, made by pouring molten wax into a bucket of broken ice. The bucket is then rotated at high speed. As the wax penetrates the negative space between the ice chunks, it cools and solidifies. Once it has set, the ice is allowed to melt, leaving behind a delicate filigree. (Though extremely fragile, it can be shipped simply by re-freezing it into a block and putting it on a refrigerated truck.) Arbel has also revisited 19th century electroforming technology to create amorphous metal elements for jewelry and lighting. He begins with a randomly selected object – any old bolt will do – then subjects it to the chemical plating process several hundred thousand times, allowing the deposit of metal to accumulate in a fractal encrustation.

As is hopefully clear by now, both practically and philosophically, Arbel's approach is quite different to that of conventional industrial design. Normally, a designer defines the intended result (most often employing a drawing or model), and then instigates production so as to achieve it as closely as possible. That is, the designer sets up a target and then tries to hit it, dead center. Along the there may be extensive experimentation with prototypes, but even then, the objective is to resolve the project into a defined state. For Arbel, by contrast, there are an infinite number of bullseyes, each one located retroactively, wherever his arrows happen to have landed. Rather than attempting to bind recalcitrant materiality to his will, he allows it to find its own form, granting it a degree of agency.

Almost as if to diagram these rather abstract concepts, Arbel has been doing an interesting thing lately: he's been cutting through his own objects, to reveal their cross-sections. In fact this has been a common practice in his studio for years. Just as someone learning to throw pottery on the wheel might use a wire to slice through what they've made, to see if the wall is even, Arbel and his team have long used cutting for diagnostic reasons, to get a better understanding of how the forms are building themselves. In a few cases, as in the aforementioned 84, they did include a planar slice through the object as a design feature. But only recently, as he witnessed the fascinating shapes that his columns produced when vertically cut, did it dawn on Arbel that it might be worth pursuing the cross-section as a more general design technique.

Cutting is an act of destruction, but it also creates. The three-dimensional shape yields a two-dimensional silhouette, as in a polished geode or piece of petrified wood. And because this flat profile can be judged independently, it becomes another arena for research: how to create a situation in which the cut will be compelling. This dynamic exemplifies the indirect nature of parametric design. By changing a constraint "upstream" of the making process – material selection or scale, for example – the quality of line and pattern in the finished result becomes totally different. The cross-section also allows for easy visual access to the temporal dynamic of parametric design. Extended durational processes, such layering, accumulation, and chemical reaction, are compressed into a single view.

Arbel's unusual design methodology raises intriguing theoretical issues, which can be grouped under three headings: aesthetics, authorship, and epistemology. Let's take these in turn, beginning with aesthetics. Conventionally, a designer's sense of form, their "eye" as it's often said, has primacy. This tends to result in a personal sensibility, a recognizable signature look. Arbel's works – of which there are currently 94, and counting – have no such stylistic uniformity. What they have in common is not aesthetic predilection, but a way of thinking. Instead of individualistic self-expression, Arbel gives us the self-exemplification of process. Importantly, he does not indulge in impositions of personal preference, editing out particular results that he deems "unsuccessful." If outcomes of a project seem generally unsatisfactory, he goes right back to the beginning, rethinking the parameters and letting them run again, and again. Once the design is correctly calibrated and executed, by definition, the result cannot be wrong.

By Glenn Adamson

While it may not be immediately apparent, this refusal of personal taste – Arbel's unwillingness to pick and choose on an ad hoc basis – connects strongly to a democratic tradition in design thinking. In the eighteenth century, when modern aesthetic philosophy was in its formative period, thinkers like the Earl of Shaftesbury and Immanuel Kant developed an idea of beauty based on subjective determinations of quality. They believed that proper judgment – whether in art or in nature – was the mark of enlightened subjectivity. Beauty offered the cultivated aesthete a connection to the divine, and to a universal ideal, via artistic genius or a sense of natural order. This conception of aesthetics is quite obviously elitist. It insists on a single truth that is available only to those of refined sensibility; and in practical terms, that kind of connoisseurship was the province of white, Euroamerican men.

An explicit challenge to this conception of aesthetics came in the nineteenth century, when design reformers like Owen Jones began to look outside the European tradition – to the patterns of Islamic textiles and tilework, for example – and attempted to establish basic rules to design by. Wallpaper is flat, so it should look flat. Ornament should be secondary to form. These were early tremors of what later became modernism, a polymorphous phenomenon to be sure, but one with a stiff spine. Mantras like "form follows function" and "truth to materials" bestowed upon design a pseudo-scientific character. Crucially, this intellectual turn was allied to socialist politics. The reason that the Bauhaus designers were so driven to perfect their objects was because they wanted everyone to have them. Each chair, teapot, or lamp they produced was intended as a universal solution.

This globalizing ambition came under serious critique decades later with the advent of postmodernism, which insisted on complexity and contradiction rather than uniform solutions. Yet it remains operative in the marketplace – witness the pervasiveness of IKEA's studied neutrality. And still today, in most cases, designers presume that they face a choice between subjective taste and objective logic. Arbel's parametric approach introduces a new variable to this apparently zero-sum game, providing infinite variation without abandoning rigorous principles. He has invented means of "mass customization" that result in whole aesthetic spectrums. This dislodges him from the role of tastemaker, while retaining the role of form-giver.

This relates to a second, similarly stark opposition in design, which concerns models of authorship. On the one hand, there is the conception of the designer as an auteur. In this familiar notion of authorship, designers work either singly or in groups to give shape to the world. ("Form-giving" is, in fact, the most common term for design in Scandinavian countries.) Clients and the public grant designers and architects the right to do so on the basis of their superior expertise, their ability to skillfully negotiate various competing factors such as cost, functionality, appearance, and environmental impact. This model of design authorship is top-down, centrifugal, with the designer positioned as a point of origin.

At the other extreme is the domain of material culture, in which anonymity is the norm, and objects appear simply to emerge within the matrix of everyday use. This is a bottom-up, centripetal way of thinking about design, in which widely dispersed cultural currents are seen as converging into objects. An influential version of this perspective was put forward by the Japanese theorist of mingei (roughly, "folk craft") Soetsu Yanagi, who upheld the so-called "unknown craftsman" as a paragon. He believed that true beauty could only evolve from un-self-conscious creativity, expressing the long, deep rhythms of tradition. In effect, this was an authorless conception of design, or perhaps one that implied a collective form of authorship, produced by many people over many generations, bound together through common experience. A compatible idea was put forward by the French historian Henri Focillon, in his 1935 book The Life of Forms in Art. Focillon postulated a dynamic in which style itself was the protagonist of art history, and artists and artisans understood as its stewards. He considered forms to have a form of agency, built out of the conjunction of materials, tools, and the canon of previous monuments. Omer Arbels Parametric Design: An Ongoing Experiment

By Glenn Adamson

Like Yanagi, though in a very different way, Focillon placed great emphasis on craft, seeing it as a disciplinary logic, a set of constraints within which creativity occurs. In effect, Arbel is applying this same kind of thinking to his designs. The medieval carvers whom Focillon studied might develop style over the course of centuries, their ornaments naturally evolving from the intersection of tools and stone. Arbel adopts a similarly materialist approach, but (as befits a citizen of the 21st century) allows technical determinacy to unfold at rapid speed. In this way, he has found a way to resolve the dialectical tension between the designer as form-giver, and the designer as artisan.

An important aspect of this synthetic approach is the sheer complexity of the forms that Arbel generates. Unlike a conventional industrial designer, he produces objects that are far beyond his own capability to plan. This raises a third and final theoretical topic, perhaps the most fascinating of all the facets of Arbel's practice: that of epistemology. While the wax-casting, electroforming, and other technical processes that Arbel employs are obviously very different, they result in highly convoluted topologies, for all practical purposes impossible for the human mind to grasp. Indeed, though made using old methods, one way to think about them is as models of complexity itself.

This has become an absolutely central issue in recent years, one that confronts us all: thanks to the internet, the quantity (though not the quality!) of information available to the general public has increased exponentially. The question that has animated epistemology since the times of ancient Greece – how do we know what we know? – has rather quickly become charged with political consequence. Witness the abysmal state of contemporary politics in the USA – pitting reactionaries, who want to shut out the world's complicatedness, against progressives, who welcome global interconnectedness as a force for good. The truth lies somewhere in between: hyper-complexity cannot be simply wished away, or kept safely on the other side of a wall; but it is a genuine threat. It erodes democracy (how can you vote on issues you have no hope of understanding?) and accountability (when algorithms determine the flow of capital, who is really responsible?).

This is a big story, obviously, but even in sketch form it helps to explain the feeling of urgency that Arbel's intricate, analogue objects possess. Each one is an anchor point within the maelstrom of the possible. His inventive use of hyper-complexity demonstrates that it need not be a barrier to comprehension. Information overload can itself be channeled, shaped into a generative force. The theorist of postmodernism Jean Baudrillard, once said that in a culture of simulations, such as our own, "the map precedes the territory." By this, he meant that society has fallen prey to the seduction of inauthenticity, so that reality itself has ceased to exert a hold on the cultural imagination. Anyone who regularly spends time on social media will readily grant the force of this argument. But Arbel turns Baudrillard's theorem on its head. In his design method, the "map" (parametrically defined) does precede the "territory" (the diverse physical artifacts that result). Rather than a mise en abyme, however, in which the integrity of the object dissolves, he constructs recursive relationships, in which the maps are constantly, rigorously tested, before being re-inscribed. The territory and the map converge, each form serving in both capacities, within an iterative experimental process.

Where will Arbel's restless yet rigorous practice go next? As with any designer of his caliber, it is hard to say. But it might be worth observing, in conclusion, that he has built not just his objects but his entire practice along parametric lines. He operates an unusually complex business model, with a separate commercial platform for lighting and glassware (Bocci) and an R&D-oriented product design studio (OAO Works), in addition to his architectural office. This structure ensures unpredictable hybridization, with both interesting problems and productive solutions flowing laterally across the team and within his own head. It is a demanding way of approaching the job – one that permanently defers job description itself – but extraordinary in its expansive potential. So where is Arbel going? Even he cannot say for certain. This is the power of parametrics. It defines a field of action, but everything still remains in play.