

Illuminating the Underground

BY LESLIE WOLKE





The Shakespear team always starts with hand-drawn sketches, such as this early concept for a unifying band of information at the subway platform.

The unifying band, or “perpetual belt” as Shakespear calls it, organizes all the information conveyed at the subway platform. The bands are always the same height from the platform, providing users a reassuring source of information.



Opposite: The subway entrances are highly visible, even in a city of landmarks.

Diseño Shakespear transforms the Buenos Aires subway with a bold identity and a user-friendly sign system. How does a city derive its character—the unique qualities that define a sense of place? Every city has its own temperament, its own rhythms, and its own visual language. But how are they shaped?

Some believe it is the collective personality of its inhabitants writ large in the buildings and boulevards; only hearty Midwesterners could have built the City of the Big Shoulders on its unrelenting grid. Others point to the city fathers and visionaries who oriented the built environment in its landscape and set the rules for future growth; Frederick Law Olmsted created a haven for generations of New Yorkers in Central Park. Or is it merely a chaotic tangle of happy accidents that creates a city’s identity?

While the ultimate answer may be “all of the above,” there’s a certain pleasure in attempting to decode a city’s mystique. And in Buenos Aires, many of the clues lead to Diseño Shakespear. The firm has made its mark on many facets of the city’s infrastructure, most recently the transformation of the subway system, the oldest and one of the largest underground transportation systems in Latin America.

The first Buenos Aires subway station was inaugurated in 1913 at the peak of the European immigration wave that brought more than 3 million new citizens to Argentina, most of whom settled in and near Buenos Aires. Today the city counts more than 12 million residents or porteños, as they are known. The subway system has grown at a corresponding pace, consolidating ownership and adding stations and lines to serve the swelling city.

A welcoming brand and a readable map

“Transformation” is the only word that describes the breadth of Diseño Shakespear’s engagement with Metrovías (the private operator of the system), starting with the rebranding of the system from the formal “Subterráneos de Buenos Aires” to the familiar and friendly “Subte.”

Shakespear’s greatest task in the 10-year project was to demonstrate the importance of this new and approachable brand and its position as the emblem of the new signage system. Overcoming his client’s desire to use Metrovías in the name was “half the battle.”

That battle was won, and today Metrovías CEO Alberto Verra cherishes the new brand. “We understand that the subway

belongs to the city and its people and they call it 'Subte,' which is unique. It's an icon of Buenos Aires."

The first round of work began in 1995 and focused on identity, interior signage, and map redesign for the system of five lines. (A sixth has since been added.) Ronald and his sons Lorenzo and Juan employed their typical project methodology of "research, analysis, synthesis, drafts, final project, implementation." Lorenzo visited the major subway systems of the world and returned to the studio with the best and worst of system design. Verra describes the Shakespears' work process as "creativity derived through understanding."

The Shakespears' map, which has become an iconic guide to the system, was inspired by Henry C. Beck's 1933 diagrammatic map of the London Underground. At Beck's time, it was a radical notion to ignore the actual topology of the subway lines and abstract the network into a more simplified and accessible geometry. By limiting themselves to vertical, horizontal, and 45-degree angles, then adding an underlay of major streets above (another novel approach), the Shakespear team generated a map that was comprehensible as well as beautiful. Place it next to Massimo Vignelli's New York subway system map, and you discover another important influence in their work.

Composing the subway station

The next challenge was the interior station signage. Through a combination of observational research and what Ronald calls "verified intuition," the team prioritized the goals that the signage must accomplish. The studio adheres to two fundamental tenets of wayfinding:

- The signs must be easy to find and their locations must be predictable.
- The signs must be easy to understand.

The experience of riding the subway introduced a third tenet derived from rider observation: the most important signs are those that direct visitors to the exit, up and out to street level. Ronald explains that designers have the obligation "to listen to people, to decipher their codes, to discover their yearnings, and to give them an answer." With that in mind, the team uncovered an anxiety about traveling underground and a compulsion to exit the system as soon as possible. "The exit sign is the most important symbol to people on the subway," explains Ronald. "How do you escape? It is unnatural to be underground in the city."

The team used these principles to create a grid system of sign types and a hierarchy of information that could be applied to the various conditions of the system's 86 subway stations. Station identifiers that run in bands along the tracks are always located at the same height—2.2 meters from the platform floor—to provide optimum viewing from inside the subway car. All signs are parallel with the subway car, again for maximum visibility, except for those critical signs that guide people to the exits. They are perpendicular to the tracks and feature clear, simple messages. There are a total of 41 signs per station in a standard configuration.

The visual language for the Subte is bold and concise. A palette of six strong colors brands the six lines and white Frutiger type is used at various weights for optimum legibility.

To balance the rigor of type and color choices, each sign is capped with a cylindrical header of the line color, providing a flourish of detail

BUENOS AIRES SUBWAY SYSTEM

Client: Metrovias SA

Location: Buenos Aires

Design: Diseño Shakespear
Argentina

Design Team: Lorenzo Shakespear, Juan Shakespear, Ronald Shakespear (directors), Joaquín Viramonte, Cecilia Bonnetón, Juan José Aguiló (designers), Gonzalo Strasser (architect), Lucía Díaz (public relations), Javier Fava (administration), Juan Cerdá (legal advisor), Luis Travi (chief administrator)

Consultants: Watson & Levy (legal consultant), Fernando Estevez (fabrication consultant)

Fabrication: Acrílicos Atlas SA

Photos: Juan Hitters, Lorenzo Shakespear, Hector Calderone

Standard aluminum extrusions frame double-faced acrylic signs with maps at eye level.



above the informational content. The header extends over the advertising space that punctuates each stop, providing a 2.20-meter unifying element—or “perpetual belt” as Shakespear calls it—to the station interior. He says it was difficult to convey the importance of this master element that repeats the station name every 2.5 meters, and yet it is one of the most reassuring elements of the system to riders looking for their stop.

During the design phase, full-scale prototypes of the interior signage system were installed at two stations. This was a very productive, yet expensive step in the project, Ronald explains. “A prototype is very useful. It proves it works. It proves to me it works.”

All the interior signage is composed of 2mm-thick aluminum panels and extruded cylinders with a polyurethane coating and applied vinyl graphics.

Above the tunnels: appointing the entrances

In 2006, the project advanced with the complete replacement of all exterior Subte signage. Since the oldest station is almost 100 years old, there was a great variety of subway entrance conditions and entry signage. Many entrances sported filigreed ironwork and ornate lettering.

The Shakespear team chose to adapt the visual design elements used in the interior signage, reassembling them in the grand scale required to identify stations on Buenos Aires’ busy streets and wide boulevards. The circle that identified the various lines on interior signage was made three dimensional and illuminated to become a recognizable beacon hovering above the streetscape. The cylindrical caps were rotated to become pillars supporting the spherical landmark. This economy of

design appears effortless, as if it were the only logical conclusion to the design problem at hand.

Exterior entrance signs are composed of sign boxes formed by standard aluminum extrusion and double-faced acrylic signs illuminated internally with long-life lighting elements chosen for high visibility and low maintenance. Each entrance features a color vinyl system map, backlit and mounted in aluminum frames with iron columns.

For both the internal and external elements, the local fabricator, Acrílicos Atlas SA, led the fabrication and installation of more than 3,500 signs.

In a city where the bus system can take years to master, the Subte is recognized as the easiest way to navigate the city, known for the widest streets in the world and a fair share of traffic congestion. A large part of that ease comes from the absolutely clear visual structure of Diseño Shakespear’s wayfinding system.

But perhaps a less tangible quality—the inherent suitability of the system as a whole—is what has made the Subte brand an inviting, authentic, and reliable element of the city. With a daily ridership of 1.3 million, the Subte has become a subject of pride for porteños. When asked how Diseño Shakespear has made such a long-lasting and fundamental impact on his city, Ronald responds, “All I know is that when design establishes an affectionate relationship with people, it remains. Forever.” X

Leslie Wolke, SEGD, is an associate principal with fd2s, Inc., Austin. She had the pleasure of meeting Ronald on a recent trip to Buenos Aires. With her husband and her Subtepass, she traveled all the major lines like a porteño.

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Shakespear says subway riders have a natural anxiety about being underground, so exit signs are the most important elements of the system.



The Subte claims its place in the vibrant visual language of Buenos Aires.