
Navigating Today's Signs: An Interview with Mies Hora

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Mies Hora has been a sign and symbol maven for many years and his company, Ultimate Symbol, has published a number of the most frequently used free-source books and CDs. His recent *Official Signs & Icons 2* is a veritable encyclopedia of ubiquitous design. Hora has collected complete sets of household, streetwise, industrial and medical signs—some cautionary, many life-saving. In this interview, he discusses the role of icons in everyday life and the need for sign literacy.

Heller: You have been a signs and symbols obsessive for quite some time. What is the reason for this interest?

Hora: My sensibilities were forged through immersion in my parents' Charles-and-Ray-Eames-like environment, an alternate universe of visual communication with its own language of form, function, color and symbols. I know of few serious designers who aren't utterly fascinated by the possibilities of communicating meaning without the use of words or letterforms. What we're really talking about is semiology, or the study and use of signs and symbols, and what they signal.

Heller: This is one of the most exhaustive compilations of highway, safety, international icons, even Braille signs and symbols I've ever seen. How easy or difficult was it to gather this material?

Hora: One would think that highly organized information about established systems like Braille would be easily accessible, but I found that not to be so in most cases. Reliable data is surprisingly fragmentary, dated, incorrect and hard to dig up.

Heller: Is this the first inclusive resource?

Hora: I see my effort as a modern descendent of references like Henry Dreyfuss' *Symbol Sourcebook* and Rudolf Modley's *Handbook of Pictorial Symbols*, both of which are 30 or more years old. The significant difference is that instead of simply collecting, reporting and displaying material in various degrees of reproduction quality—rough drawings, thumbnails, sketches, Photostats—in a printed document, I am providing existing and newly minted

source material in electronic format for immediate use by design professionals in their work. The bar is exponentially higher when the reproduction standard is artwork in a clean, precise, vector-based EPS format that accurately presents the officially sanctioned originals.

Heller: How long did it take to get it right?

Hora: Official Signs & Icons 2 is the result of a 12-year evolutionary process. I have been fortunate to be at the receiving end of support, assistance, and ideas from the tightly-knit design community including renowned logo and environmental designers such as Roger Cook, Tom Geismar, Steff Geissbuhler, Karen Louis, Don Meeker, Paul Mijksenaar, Roger Whitehouse and Lance Wyman, all of whom helped provide me access to symbol artwork originals.

Heller: We are all aware of the DOT symbols created by the AIGA. Who are some of the other designers responsible for the more ubiquitous images such as the mile marker or nautical signs and symbols?

Hora: While most signs and symbols are the result of anonymous and unheralded governmental, institutional, or corporate committees and employees, there are notable exceptions. Claude Chappe, an engineer, developed the semaphore telegraph for the French Army in the late 18th century. His concept was adapted and refined by engineers for the railway and by communications experts in the U.S. Navy. A 15-year old named Louis Braille introduced his new alphabet in 1824, and it is virtually unchanged today. Roger Whitehouse, working with Peter Reedijk (and others) came up with the well-known modern handicap-accessible wheelchair symbol. Donald T. Meeker, of Meeker and Associates, has been working for decades with the National Park Service to completely redesign and update its comprehensive symbol signs system, one of the finest available. Look for them in a park near you.

Heller: Otto Neurath is probably the father of this kind of humanistic iconography, but who, for example, is responsible for the electrical icons so common today, and for the DVD, FireWire, USB and other commercial logos that you've collected?

Hora: Logos for proprietary technologies are usually developed by in-house designers (as was the case with Apple's FireWire) and are usually disseminated on the web. In general, developing technical consensus on an international scale is an enormous and complex operation. Organizations such as ISO (International Organization for Standardization), IEC (International Electrotechnical Commission) and JEITA (Japan Electronics and Information Technology Industries Association) develop technical agreements that provide the framework for compatible technology worldwide. For example, ISO is a network of the national standards institutes in 150 countries. In all, there are some 3,000 ISO technical groups (technical committees, subcommittees, working groups, etc.) in which some 50,000 experts participate annually to develop ISO standards. The work is carried out by experts on loan from the industrial, technical and business sectors that have asked for the standards, and that subsequently put them to use. These experts may be joined by others with relevant knowledge, such as representatives of government agencies, consumer organizations, academia and testing laboratories.

As in most standards, it is the message content that is the key element being agreed upon and published, not the final rendering. The symbols are intended to be interpreted within guidelines and adapted for use in varying reproduction processes, such as printing, hot stamping and injection molding. Tim K. Murphy, a former IBM employee and member of a corporate symbol standards technical committee, was helpful in providing me with the general criteria and guidance used for the development and production of the electronic and mechanical labeling symbols in this book, some of which he was responsible for developing. I personally hired designer/illustrators and art directed the rendering in vector format of 1,000-plus ISO/IEC electronic and mechanical symbols so that they would be consistent with those guidelines in form and execution.

Heller: Were there any signs or symbols that you did not include, perhaps those that represented inappropriate language or activity?

Hora: There are many humorous and scatological signs and symbols that would obviously never make it into an officially sanctioned sign or labeling system. Note that the official American Sign Language system does not include a hand sign with just a middle finger. We removed a National Socialist Party swastika from Design Elements, however, after repeated calls from offended parties. Pointing out that the Nazi emblem is a perennial favorite of book cover designers did not mollify the offended.

Heller: Decades ago, I never saw the diagonal “no” line in signs in the United States, while in Europe they were common. Now they’re rather ubiquitous here too. What makes a sign uniquely American?

Hora: Interestingly, our best known signs, the United States road sign system (as depicted in the Manual of Uniform Traffic Control Devices [MUTCD]), is probably one of the least effective from a global, non-verbal standpoint. We still have far too many word messages, like “exit closed,” which is precarious for non-English speaking foreign travelers. As pointed out recently by Deborah Row, an information designer who has traveled widely photographing road signage overseas for years, even so called under-developed countries rely more on pictorial symbols to navigate. The wisdom of the UNCRT (United Nations Conference on Road and Motor Transports) Protocol on Road Signs and Signals guideline used throughout most of the world is that it is designed to avoid just such confusion and misapprehension. Canadian road signs are based on the U.S. system. The Canadians, like us, have begun to introduce alternate signs using the metric system of measurements in accordance with their continuing integration of European nomenclature. America’s great sign systems, such as the AIGA/DOT and National Park Service Recreational Symbols, have become benchmarks for clarity and simplicity, influences that have definitely found their way into the signage approach in other countries.

Heller: What are the legalities inherent in safety or hospitality symbol signs? Is there a standards granting body?

Hora: Like the development of most modern symbol and sign systems, safety symbol standardization is an evolutionary process that never ceases. Progress is driven by the review, revision and publication at regular intervals of national and international guidelines or standards. While these standards provide guidelines for symbol creation and use, interestingly, they are voluntary and not a legal requirement. In practice, however, the standards are essentially mandatory. In the United States, the U.S. Department of Transportation (DOT) developed the Hazardous Material Transportation Regulations (HMR) to promote the safe transportation of hazardous materials (HAZMAT). American standards on equipment and products sold in the United States are produced by the American National Standards Institute (ANSI). One problem that has arisen is that the international (ISO) and American (ANSI) standards are not always consistent. The bringing together of various standards requirements so that a given set of symbols or standards are unified is called "harmonization."

Although optional, the ISO standards have the advantage of recognizing that symbols alone have the ability to communicate across language barriers, whereas the American standards still specify the use of symbols and worded messages for safety signs. While encouraged, the ANSI and ISO symbol standards do not require the use of the basic, but crudely drawn symbols that are provided as examples. What is agreed is that the image content is more important than the formalities of the artwork. While the existing standards provide voluntary graphic guidelines, they also make clear that it is advisable to utilize or develop safety symbols that are designed, wherever possible, as elements of a consistent visual system.

Heller: So, your goal was to ?

Hora: My intent was to make available a visually consistent, harmonized system of symbols that can be used on labels and signs both in the United States and abroad. Strangely, this had not yet been done at a high level of graphic excellence. My research turned up nothing but a hodge-podge of stylistic and cultural variations. So, after choosing the image content, symbols from both international and American sources were carefully organized into a logical system. Many symbols were then graphically refined to conform with an established design style using the AIGA/DOT Transportation and NPS Recreational Symbols as models. I worked with my own designers to develop new, previously non-existent images for many safety symbols, including a complete new set of mandatory personal protective equipment symbols.

Heller: Is there a symbol set for virtually everything that needs to be communicated?

Hora: I discovered in 1999 that no internationally accepted or comprehensive reference symbol set existed for the vast global hotel and lodging industry. The result is that accommodation firms design their own varied (and branded) visual communications for many of the same activities and facilities, sometimes basing them on outdated source material.

Heller: With the plethora of signs you've gathered here, is there really any room for new ones?

Hora: Absolutely! The process of research, collection and reproduction is continuous, as systems are updated, developed and/or are simply brought to my attention.

I am already gathering material for the next edition which will include updates to existing systems such as new transportation signs recently implemented by the Port Authority of NY & NJ, a much-needed medical symbol system currently being developed, and internationally recognized symbols for astronomy, mapping, proofreader marks, mathematics and musical notation, just for starters. Please let me know if you have any suggestions.

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About the Author. Steven Heller, co-chair of MFA "Designer As Author" at School of Visual Arts, is the author of *Merz to Emigre and Beyond: Avant Garde Magazine Design of the Twentieth Century* (Phaidon Press), *The Education of a Comics Artist* co-edited with Michael Dooley (Allworth Press), *The Education of a Graphic Designer, Second Edition* and *The Education of an Art Director* (with Veronique Vienne) (Allworth Press).

