

You Can't Take Everything With You

Portable Effects Prospectus

by Rachel Strickland . 23 April 1997

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Where are you GOING today?

What did you LEAVE behind?

What things did you BRING?

How do you WEAR these things while you're in motion?

Where do you PARK them when you stop?

Do you think you may have FORGOTTEN the most important thing?



Illustration by H.A. Rey [Payne 1944].

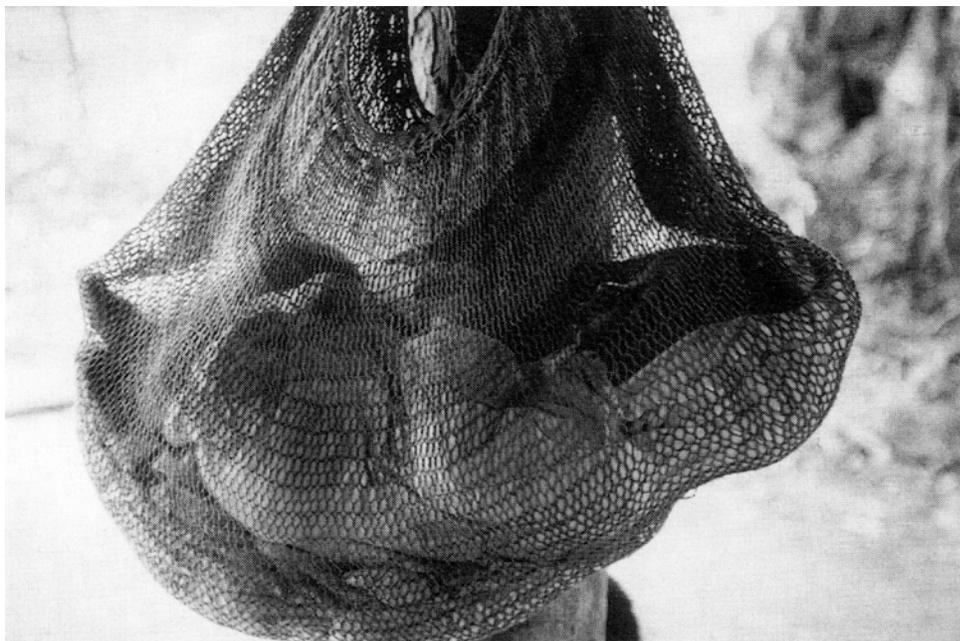
Many animals carry things. They carry their young and food for survival and they carry building materials. They carry these things in a variety of ways, in their mouths or on their tails or inside the body's various recesses and pouches and folds of skin. Apparently we humans are the only animal that has contrived a device for carrying things, and this simple fact has had profound consequences for our cultural development.

**SOFT
TOOLS**
by
**Larry
Gonick**



[Gonick 1990].

Some paleoanthropologists have even gone so far as to speculate that the oldest invention of our protohuman ancestors was not a sharpened stone or projectile for hunting, as we've been lead to believe since long before the Flintstones. Rather it may have been a bag for carrying things—which unlike those durable stone points and arrowheads has disappeared without a trace, for it would have been made of leaves or grasses or stems, or of animal skins, or some other biodegradable material.



Telefol string bag, Central New Guinea. Photo by Maureen MacKenzie [MacKenzie 1991].

Proponents of this revisionist view of paleoanthropology that features Woman the Gatherer have not been able to agree whether that original bag was used for carrying infants, who could no longer grasp the mother with their feet as chimpanzees do, or whether it was used for gathering food. Since women were responsible for child care and for nutrition, we can imagine that they might have used the same bag for transporting both the produce of the land and the produce of their wombs [Tanner and Zihlman 1976].

Without a container in which to carry things, all individuals must forage for themselves. You put the nuts and berries in your mouth as you find them. A human equipped with a bag could readily collect in a few hours as much as 10 times the weight of food required for her own daily consumption [Lee 1979].

"One oddly simple but basic fact has figured enormously in . . . the emergence of modern humans: the ability to carry things," observed anthropologist Richard Leakey. "The concept itself is inarguably simple, but it is fundamental because of the unique degree of independence from the environment that it confers on humanity." The sharing of food, to which Leakey attributes the inception of community, did not become an institution until our ancestors figured out how to carry food. Three other portable commodities define critical junctures along the journey of human evolution: Capabilities for transporting water and fire not only extended the range of our ancestors' hunting and gathering territories, but also allowed their migration to Asia and Europe. "Finally comes the ability to transport experience itself—from individual to individual and from generation to generation. The utensil in which it is transported is, of course, language" [Leakey and Lewin 1977, 124].

PORTABLE EFFECTS: A Survey of Nomadic Design Practice

PORTABLE EFFECTS is a project that looks at what people carry and how they carry it, as a way of learning about design strategies of ordinary people in everyday life. "Portable architecture" is another phrase I use to describe this nomadic design practice—the mobile miniature piece of our environment that we take with us from place to place.



Video still from Thelma Gehry's 1989 *Portable Portrait* by Rachel Strickland.

Between setting forth in the morning and returning home at night, each person lives nomadically for several hours a day. You can't take everything with you—neither in your backpack nor in your head. Identifying essentials—figuring out how to contain, arrange and keep track of them as you go—are instances of design thinking.

Underlying the PORTABLE EFFECTS research is an assumption that design is not limited to the province of specialists who have formal training in such disciplines as architecture, graphics, and industrial design. Rather, design behavior is a fundamental element of our species adaptation—key to humans' survival strategies.

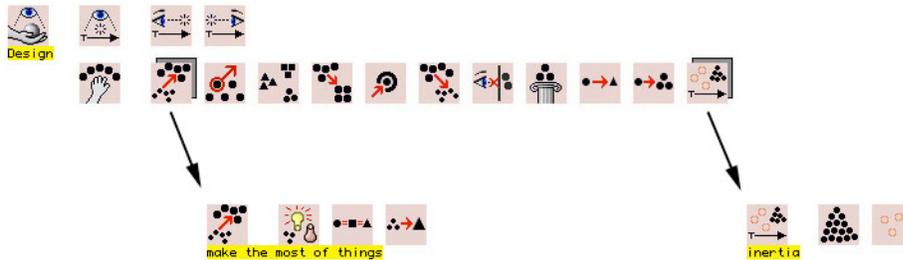
The inspiration for the PORTABLE EFFECTS project dates back to a summer in Japan in 1984, when I was seeking funds for an interactive video project that would explore traditional Japanese architectural space. In the process of finding my way around Kyoto those several months, and encountering the methods of a culture that's enormously sophisticated in the ways of folding, stacking, rolling, nesting, carrying, miniaturizing, and transforming things, I began to notice people's "portable environments" wherever I turned.

Yet it was not till I was working with Apple Computer's research division several years after that, when Apple was developing the Newton, and other manufacturers were tinkering with similar visions of handheld computing devices—that I first began to videotape scenes of people and the things they carry, as a way of learning about the design practices of ordinary people in everyday life.



By now I have collected many more than a hundred of these nomadic portraits. The growing portrait gallery provided the basis for the experimental cinema project I conducted at Interval. A portrait (like a place) is another kind of structure that is not a story. As I accumulated the portraits, it became increasingly obvious that they were not going to add up to a feature length documentary with a beginning and a middle and an end. The richness of the material has a great deal to do with the range and diversity of the people who are its subjects. But how could we give viewers access to this richness without making them watch portrait after portrait for hours on end? How could we enable product inventors, for example,

to pursue the threads of their own interest and to discover patterns among the various collections and design strategies? The work at Interval developed a series of polylinear cinema prototypes for interactive viewing, experimenting with cinematic linkages among scenes through invisible annotation hierarchies and seamless expansions.



The video annotation language of Portable Effects is a special dialect of Media Streams—a system that was developed by Marc Davis for his PhD. at MIT Media Lab, in collaboration with Brian Williams and Golan Levin [Davis 1995].

Don't Forget Your Stuff: A Museum Installation for Interactive Anthropology



Operating instructions for Exploratorium visitors, graphic design by Peter Spreenberg and Dennis Poon

In 1993 I received a grant from the NEA to seed development of a multimedia database for introducing people to principles of design through the Portable Effects material. Interval Research Corporation and the Exploratorium ventured to collaborate in prototyping and mounting a public exhibition that would capture visitors' insights about nomadic design practice. Our design brief, drafted in cooperation with Exploratorium exhibit staff, called for creating an architectural environment and a system of interactions that would prompt museum visitors to consider the objects they carry every day and capture the sense of their transactions with these objects. The exhibit that grew from this interactive experience would be a cumulative affair—an audiovisual inventory of the things that visitors bring to it, and the purposes and meanings they ascribe to these things. As individuals articulated their schemes of collection and sorting, they would have an opportunity to add their profiles to an extensible database, as well as to compare their own portable survival tactics with those of other visitors.



Papua New Guinea Highlands, postcard published by the British Museum, 1993

Why is head-borne transport common among some cultures and entirely improbable for others? After posing the question to field anthropologists, as well as to several Balinese homemakers and Portuguese fishermen who routinely perform the stunt, I have yet to get to the bottom of this paradox.

Considering that the use of portable containers is so ancient, and so pivotal to our identity as a species, you might think there would be plenty of factual data and pithy insights concerning personal carrying systems. Yet as I began to pursue it, I quickly discovered that I was searching for an extraordinarily elusive topic. In fact there is no body of literature, no keywords you can look up in the library catalog or the *Encyclopedia Britannica*. Apparently the business of carrying things is so fundamental to human behavior that we've tossed it off to second nature and seldom given it another thought.

In order to construct a conceptual map of the field—this subject of personal carrying systems—you are left to draw some very tenuous connections among the sparse and vaguely marked outcroppings of taken-for-granted knowledge that belongs to such disparate domains as paleoanthropology, ergonomics, airline baggage tracking, and costume history for stage and cinema. A few anthropologists have conducted fieldwork with nomadic hunter-gatherers, for example. The science of ergonomics has tended to focus on the environment that is arrayed around us, with the exception of lifting studies specifically related to the back injuries that are an occupational hazard for manual laborers. The literature of fashion has surprisingly little to tell us about the history and evolution of carrying devices. I suspect that this is not due to accidental oversight or to a case of amnesia. More likely we should regard it as a hint that carrying has never been very fashionable. Fashion was always defined by people of royalty, wealth, and power. These were the people who had servants to carry things for them.

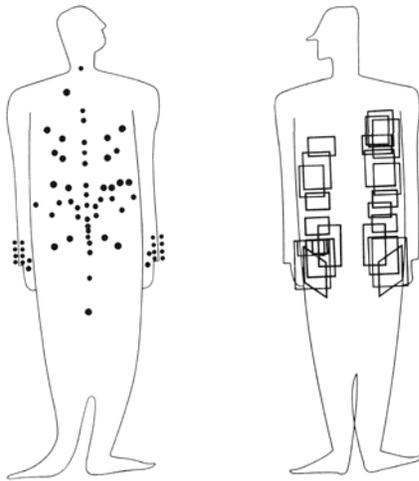
In a book of advice for corporate ladder climbers, Michael Korda examined the status symbolism of briefcases [Korda 1975]:

The bulkier the case, the less power its carrier usually has, the lowest power status being that of the salesman's sample case, a big, boxlike piece of luggage in heavy vinyl. Attaché cases that open up to reveal a complete desk, with files and a blotter, are only useful for impressing elderly ladies on airplanes. Elegant, thin attaché cases, however expensive and magnificent, always look like somebody's birthday present to a young executive on the make.

To quantify his analysis, Korda recommended the following criteria for power display:

All one can say is that a man making less than \$50,000 ought to carry an ordinary leather briefcase that opens at the top and has two handles, and that it should be old, battered, and much traveled; a man making more than \$50,000 but less than \$100,000 should carry a thin leather portfolio, the simpler the better; a man making more than \$100,000 should never carry anything.

Fashion moreover is a thing that changes. Even the Queen carries a handbag nowadays. And fashion has usually dictated different modes of portage for men and women, even if the things they carried were more or less the same.

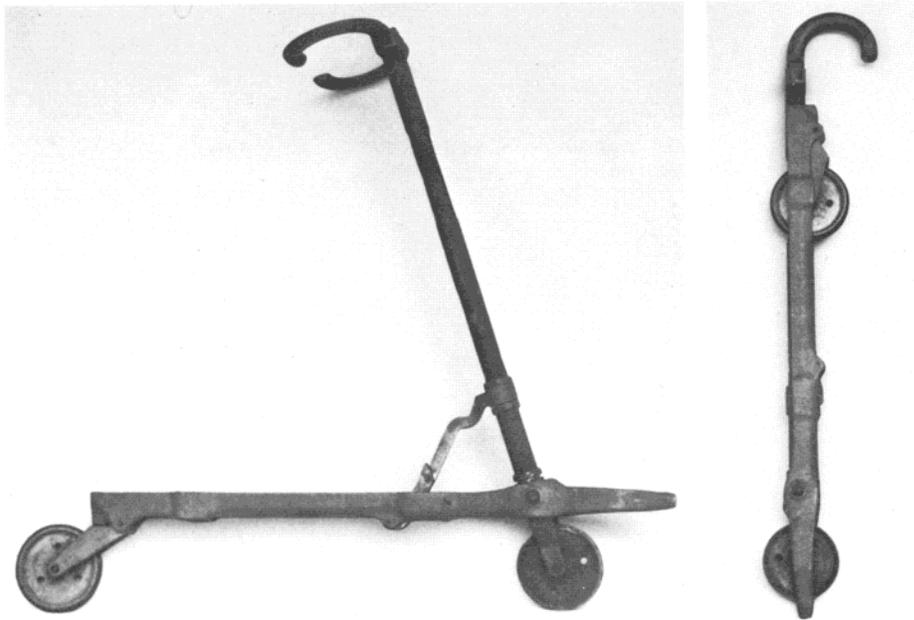


Two schematic views of a man dressed for business map the distribution of buttons and pockets [Rudofsky 1947].

Richard Martin is a costume historian who directs the Costume Institute at the Metropolitan Museum of Art. A reserved and stylish man who wears elegantly understated suits and walks to work everyday, Martin explained to me that pockets have always represented the power of carrying things in an effortless way. One acquires tremendous bodily freedom when one can distribute the essential paraphernalia on one's person without losing the use of one's hands or otherwise impeding one's ability to maneuver. In Martin's view, anything other than pockets is probably an encumbrance. The lady in those 1950's movies grasping her dainty little clutch purse is operating at a considerable disadvantage.

Indeed there are troubles even for the people with all the advantages. Industrial design critic Ralph Caplan has pointed out that “Men, to be sure, had ample pockets. But only when they were wearing jackets.”

Clearly what every man needed was a purse, just as every woman needed interior jacket pockets. Both were forbidden fashions. The solution to male purse envy came initially not from designers (who are often the last to perceive that there is a problem) but from photographers, who discovered that a camera bag could be used for extra-photographic purposes. Soon camera buffs began loading their cases with personal property never manufactured, or even dreamed of, by Kodak. Many men took up photography solely in order to carry small purchases while in shirt-sleeves [Caplan 1982].



19th century walking stick doubles as a scooter. Photo by Catherine Dike [Dike 1983].

One question that museum visitors were asked in our *Survey of Nomadic Design Practice* was: What are you carrying today that you wouldn't expect to carry 100 years from now? People's most common answers to this question were money and keys—a dubious prediction indeed if you consider the longevity of money and keys amongst our ancestors' personal cargo. The first key operated lock on record was invented in Egypt about 2000 BC. Money, as a portable medium of exchange in lieu of oxen and sheep, is suspected to have been around longer than history. Metal coins, which provided more durable and uniform accounting units than such primitive currencies as whales' teeth, red feathers, salt and gold dust, were introduced in Lydia in before 600 BC. The Chinese may have invented them even earlier.

Well then, to reverse the question, what are some of the items that respectable United States citizens have ceased to carry during the past 100 years?

A nineteenth century gentleman always had his walking stick. As a rule, you could say that he did not *use* this cane, but rather he *wore* it. “Man has always liked the feel of a stick in his hands, “ wrote Lawrence Langer. “And surely carrying one, with the feeling of security and superiority which it imparts, must be among the oldest habits of the human race” [Langer 1959]. If you hike, you have probably observed a pattern of affinity that develops between men and sticks when they are out in the woods. The

monarch's scepter and the priest's ceremonial staff are two variants on the theme. What to say about witches with broomsticks? As for the fan, in use since ancient times for cooling the bodies of potentates and for swatting flies, it had evolved by the seventeenth or eighteenth century into an instrument of sexual attraction, noted Langer.

When was the last time you saw a lady hiding her face behind a fan? Even the linen handkerchiefs that my father carried in a pocket every day and the white gloves that my mother routinely wore for church and excursions to the city virtually disappeared in the latter decades of the 20th century. Once upon a time gloves were regarded as a sign of class distinction. A handkerchief was carried by a courtier as a love token from his mistress.

Do You Say You Carry It Or Do You Wear It?

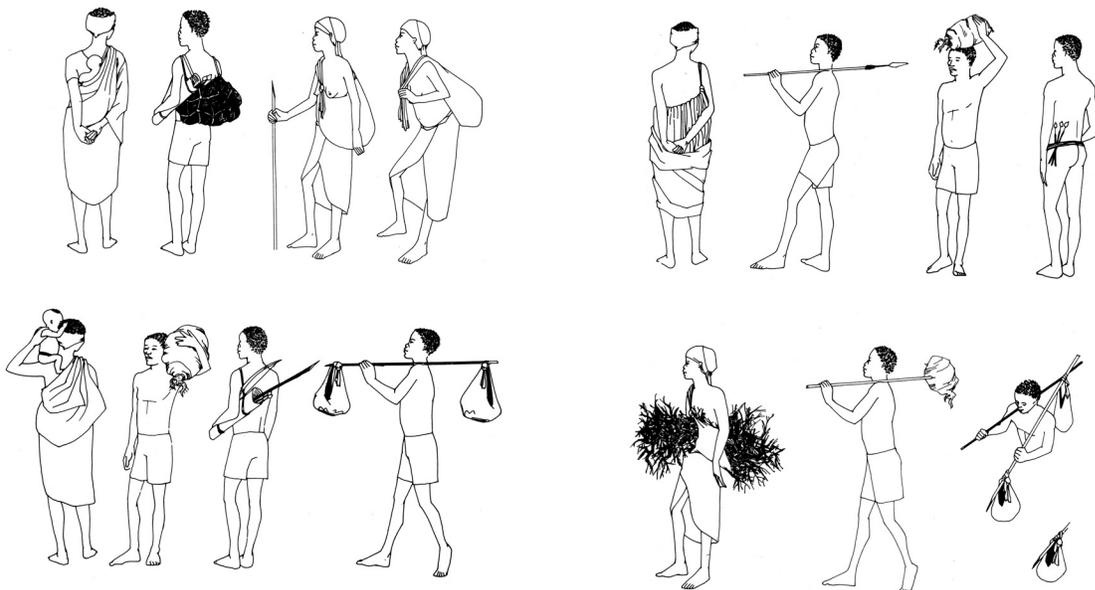
English language makes a distinction between wearing and carrying that seems the more fuzzy the harder you think about it. Some other languages have one word that covers both verbs:

French: *porter* Italian: *portare* Spanish: *llevar* German: *tragen* = "to wear, to carry."

Irish: *caith* = "to wear, to carry, to throw, to spend."

Japanese language, on the other hand, has a whole repertoire of different verbs for wearing alone, depending where on your body you wear the article.

The !Kung San of south-central Africa are nomadic hunter-gatherers. Because mobility is the essence of their adaptation, these people developed a sophisticated carrying technology. A similar degree of development may be noted in their vocabulary, "which has a multitude of terms for different ways of carrying" [Lee 1979].



!Kung carrying positions illustrated by Deborah Shulman [Lee 1979].

Just south of the Arctic Circle, the Northwest Territories are home to the Dene and the Inuit—two other aboriginal peoples whose traditional way of life depended on hunting and gathering. I made an expedition to Yellowknife, capital of the Northwest Territories, to learn about provisions that people make to survive the extreme cold winters there. We visited Bill Erasmus, Grand Chief of the Dene nation, in his downtown office. Could he tell us how Dene people think about their personal carrying systems? “First I carry myself,” the Chief reminded us. We observed that he was also carrying old receipts and obsolete lottery tickets and various subway passes and business cards that delighted him with their provision of storytelling cues, as well as a few candies and packets of tea for emergency preparedness.

Nomadic people, whether they inhabit the arid Kalahari desert or the icy tundra of northern Canada, apparently share several key ideas that distinguish them from settlers. One is their conception of the relationship between the people and the land. A nomadic perspective makes “no sharp dichotomy between the resources of the natural environment and the social wealth. The unimproved land itself is the means of production, and because it is owned by no one exclusively, it is available to everyone who can use it. [People] do not amass a surplus because they conceive of the environment itself as their storehouse” [Lee 1979].

Secondly, “for people who move around a lot . . . it would be sheer folly to amass more goods than can be carried along when the group moves. Portability is the major design feature of the items themselves” [Lee 1979]. Therefore the ability to share tools and resources, rather than duplicate them for every individual, is enormously important. Keeping up with the Joneses simply doesn’t correlate with a nomadic lifestyle. In contrast to our idea of personal wealth, material success is apt to be measured by the frequency and extent of an individual’s gift exchanges.

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If you listen to people’s evaluations of their portable design schemes, you might be tempted to conclude that there are two kinds of people in the world. There are individuals who describe themselves as compulsively neat, with everything always in its place. Then there are the rest who complain of getting snared in the traps of our own habitual chaos. In lieu of this dichotomy, Portable Effects research favors the view that there is no such thing as being disorganized. Rather, every individual has a unique style of organization that reflects that person’s design motives, priorities, and tradeoffs. It is characteristic for such an organization to evolve with the circumstances of a person’s life.

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