Friendly Alien:
Object and Interface

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Since 1996, artist Miltos Manetas makes paintings that systematically portray the new essential objects of contemporary life: joysticks, computers, computer game consoles, and computer cables (lots of them). Manetas also paints people who are usually intensely engaged in the activities made possible by consumer electronics devices, such as playing a computer game. But he never shows what games they are playing or what images they are looking at. Instead, he focuses on human-computer interface: hands clutching a joystick, a body stretched across the floor in the intense concentration or, alternatively, relaxing besides a laptop, a computer console, or a TV.

Manetas paintings of the 1990s reflected the popular then views of the computer as an unfamiliar and foreign presence, even an alien; computer work as immersion and withdrawal from the physical surrounding; the laptop, the game console "sucking in" the user away from the immediate space (similar to the vision of TV in Cronenberg's 1982 *Videodrome*). The orgy of electronic cables in these paintings which seem to grow and multiply bring the references of a cyborg and science fiction movies such as *Alien* and *Matrix*.

In contrast, his latest painting such as *Girls in Nike* (2005) represent technology as being completely integrated and fused with the lived environment: items of fashionable clothing and computer cables become complementary; the atmosphere is decorative and festive. Technology is neither threatening nor it is some outside force that has been domesticated. Rather, it is playful and

playable: it brings a party into the everyday. The sound which accompanying our interaction with the icons; the icons which playfully unfold into windows in MAC OS X; colorful desktop backgrounds; shiny reflective surfaces and anthropomorphic shapes – all this makes computers and consumer electronics devices stand out from the everyday grayness. Technology is a pet which surprises us, sometimes disobeying and even annoying us – but is always animated, always entertaining, always fun and almost fashion.

My visit to the famous Collette store in Paris the same day in October 2005 when I saw *Girls in Nike* in Manetas's studio only confirmed this new identity of consumer technology today. Collette is a legendary store that in the middle of the1990s introduced a new concept that today became an accepted genre - store as the collection of most interesting design objects currently being created around the world, with an obligatory cool café and changing art exhibitions.

Situated across the entrance was the new display positioned right in the center of the store. It housed latest cell phones, PDAs and a portable SONY Playstation. These "techno-jewels" came to dominate the store, taking the space away from albums, perfumes, cloves and various design objects which all now were occupying the perimeter. But, just as in Manetas's new paintings, the techno-objects in the case did not look dominating, threatening, or alien. They seemed to acquire the same status as perfume, photography books, clothes, and other items in the store. Put differently, they were no longer "technology." Instead, they became simply "objects" and as such they now had the same right as other objects which we use daily to be beautiful and elegant, to have interesting shapes and textures; to reflect who we use and in the same time allow us to reinvent ourselves. In short, they now belonged to the world of design and fashion rather than engineering.

Yet, as another display in Collette made it clear, the integration was far from complete. SONY just commissioned 10 top fashion designers to design cases for

PSP (Portable Sony Playstation) and they were presented in the store. The cases were disappointing – although they used a variety of materials, patterns, colors and designs, none of them felt integrated with PSP design: the refine and minimal logic of PSP menu screens, the way they slide horizontally, etc. What I saw in each case there two completely different design logics not talking to each other at all.

I feel similar unease in some of the recent attempts to make cell phones more "fashionable" by adding easily recognizable signs of fashion - encrustation, silver textures, "art deco" patterns. The problem is that techno-objects are not ordinary objects. This applies equally to cell phones, PDAs, portable game players, portable music players, portable video players, etc. They all contain interfaces – most often a screen for output and input and a few buttons, and sometimes also a trackwheel, or a small built-in keyboard. And behind the screen lives a whole separate world with its logic, aesthetics, and dynamics. And when this electronic screen and the world it presents to us ends (I am talking about the physical boundary of the screen), this creates visual and psychological feeling of discontinuity. Suddenly we are in a different world – that of non-interactive, "dead" surfaces which enclose the screen. And typically the design of these surfaces does not have much to do with the design of the screen interface. The "fashion" cases for PSP exemplify this situation. All cases were nice by themselves but the associative worlds they invoked had nothing to do with the world inside a PSP screen.

Let me put these experiences in more general terms. *Today the design of forms becomes intricately linked with the question of interface*. First of all, we need to give some visual form to what will appear on the screens of computers, mobile phones, PDAs, car navigation systems, and other devices – as well as to buttons, trackwheels, microphones, and various other input tools. Therefore, human-computer interfaces which involve a set of visual conventions such as folders, icons, and menus (i.e., a Graphical User Interface), audio conventions

(as in voice recognition interface), and particular material articulations (such as the shape, color, material and texture of a mobile phone) represent the whole new category of forms, which need to be designed today. Even more importantly, as computation becomes incorporated in our lived environment (the trend which is described by such terms as "ubiquitous computing," "pervasive computing," "ambient intelligence," "context-aware environments," "smart objects") the interfaces slowly leave the realm where they safely lived for a few decades – that is, stand-alone computers and electronics devices – and start appearing in all kinds of objects and on all kinds of surfaces, be it interior walls, furniture, benches, bags, clothing, and so on. Consequently, *the forms of all these objects that previously lived "outside of information" now have to address the likely presence of interfaces somewhere on them*.

This does not mean that from now on "form follows interface." Rather, a physical form and an interface have to learn how to accommodate each other. Beyond the traditional requirements that the material forms have to satisfy – a chair has to be comfortable for sitting, for example – their design is now being shaped by new requirements. For instance, at least so far, we are used to interact with text which is presented on flat and rectangular surface, and therefore if a screen is to be incorporated somewhere in the object, a part of it needs to be reasonably flat. Which is easy to do if an object is a table but not as easy if it is a piece of clothing or Gerry's Disney Hall in Los Angeles specifically designed not to have a single flat area. (Of course, as new technologies such as Rapid Manufacturing may soon enable easy printing of an electronic display on any surface of any object while it is being produced, its possible that we will be able to quickly adjust our perceptual habits, so moving and change-shaping display surfaces will be accepted much easier than I can imagine. In fact, the computer-controlled graphic projections on the body of dancers as in *Apparition* by Klaus Obermair or in *Interactive Opera Stage* system by Art+Com already show the aesthetic potential of displaying information over a changing non-flat not-rectangular form, i.e. a human body.)

In short, today the interface and the material object that supports it still seem to come from different worlds. The interface is a "friendly alien" but it is still the alien. The task of rethinking both interface and objects together so they can be fused into a new unity is not an easy one and it will require lots of work and imagination before aesthetically satisfying solutions will be find.

In conclusion, let me describe my visit to a show of student projects from Department of Industrial Design at Eindohoven Technical University in Netherlands, which I saw during Dutch Design Week in the fall of 2005. The department is only three years old, so instead of designing traditional objects, students are working on "smart objects." Every project in show starts with an everyday familiar object and ads some "magical" functions to it via electronics and computers. Which means that I see more examples of solid objects and media/interface surfaces coming together. In one project, a canopy placed diagonally over a child's hospital in a bed becomes an electronic canvas. By tracking the position of a special pen that does not need to touch the drawing surface, the canvas allows the child to draw on it without having to move from the bed. In another project, a special mirror allows one person to leave a message for somebody else – for instance, a different member of a household. A rectangular block containing a camera is built into a mirror frame. You take the block out, record a video message and place the block back into the frame. After you do this, the video is automatically "loaded" into the magical mirror, and a small picture appears somewhere on the mirror surface. When you click on the picture it plays a video message. Yet another project adds magical interactivity to a vertical plastic column. The lights inside the column turn it into an ambient light source. The column is covered with a special interface: a net. Depending on how you touch the net, the position, quality, and tint of the light changes. How exactly the light will change is not directly predictable, and this is what makes the interaction with light column fun. There is real magic to all these "smart objects":

we see familiar normally passive objects literally coming to life and responding to our interactions with them.

Together, these three projects show us different ways in an object, an interface and a display can be put together. The first two projects rely on already familiar behaviors – drawing with a pen or making a recording with a video camera. The last one calls for user to develop new vocabulary of movements and gestures to which the light will respond. And the ways in which a "smart object" talks back to us are also different: a canvas canopy shows a drawing, a mirror plays video, and a light glows in different ways. In short, the surface of an object can become both an output and input media, bringing together the physical and the screen-like – form and information - in surprising ways.