STUDYING TWEENS BY LOOKING AT THEIR SHOES

# 3. Combining Design and Research in MOBO  Brenda Laurel

"Human-centred and design-centred research can live happily together," argued Brenda Laurel in her presentation. "Together they can then be more than the sum of their parts." She illustrated her claim with an extended case study of a product prototype called MOBO, devised by her graduate students for that important new demographic group, tweens. MOBO began with research findings that were designed into often unexpected scenarios; it ended with a structural analysis aimed at "finding the void" – that neglected empty space where a novel product can be brought into existence.

Laurel began by noting a certain conflict between those people doing human-centered research, and those doing design-centered research – that is, using design as the subject of research. By demonstrating MOBO, a project recently completed by her students in the graduate Media Design Program at Art Center College of Design, she promised the enthusiastic audience that she would demonstrate that it is possible to combine the two methods.

The MOBO project addressed the population of tweens, or 11- to 14-year-olds, in terms of what Laurel explained as "a space bounded by the following three terms: technology,

engagement, and personal agency." She asked the students to try to understand each term as thoroughly as possible in relation to the demographic (as well as in relation with one another). Technologically, for example, the mobile phone is the dominant device of the tween generation.

The nine-month project started with photos of the tween subjects' feet (research ethics forbids publishing the faces of the subjects, but Laurel insisted that "you learn an awful lot about someone by looking at their shoes."). It then moved on to building research tools like the "swipe wall," representing the sorts of products, experiences, and styles

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Combining Design and Research
in MOBO

**Brenda Laurel**

Design and the growth of knowledge
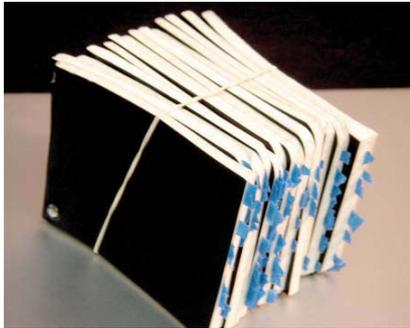
Reality map, photo audits, interviews - some of the methods used

that are targeted at tweens, and the "vibe wall" which was used as a place for the students to examine their feelings about terms being explored. According to Laurel, the latter is vital in helping researchers to quickly shed their prejudices at the start of the project.

**Reality maps**
Having used these tools to form questions and hypotheses, Laurel explained, it was time to interview target populations. In doing research with this age group, she strongly advised working with friendship pairs, in this case "dyads" (subjects were chosen and then asked to bring along their best friend). The reason for this choice is that researchers can learn more from "cross-talk", and the presence of friends ensures

honesty. Also during the interviews, researchers took photos of the tweens' clothes, and accessories. In addition to the interviews, a method called a photo audit was also used. This involved giving each child a disposable camera to take pictures of their life – and getting them to send the film back undeveloped meant they did not self-censor the images.

Using these raw materials (interviews and photos), it was now time to "design representations of our findings," explained Laurel. The result was sketch analyses in categories such as "tween realities", "personas", "scenarios", and "tween vibrations". These "reality maps" allowed researchers to visualize important aspects of reality for the age group. The maps also led them to identify the so-called "tension points" in the children's lives. One such tension point emerged as the conflict between the tweens' desire to

Time, a point of tension in tween reality
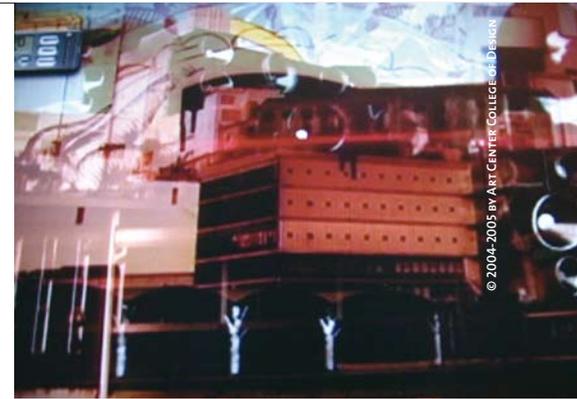
Excitement Flow, a vibrations during a tweens' day
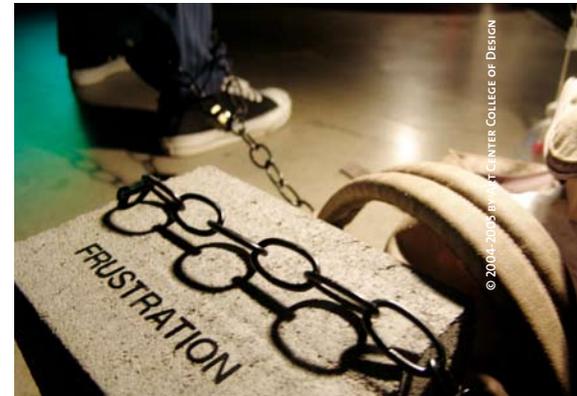
Frustration, another texture of experience

socialise and their dependence on adults for transport. Another was the conflict between wanting to do lots of activities in addition to school, and having no time to relax as a result (researchers called this "time versus no time"). Finally, there was the quintessential tween dilemma of wanting to be a teenager, but not yet being able to be a teenager, which according to Laurel was responsible for a big investment in their fantasy lives.

Researchers also looked at the different textures of experience that tweens go through during their daily lives, by making installations grouping tween experiences using key term. "Excitement flow" was the term used to represent a high adrenaline, video game, fast music energy level. In contrast, "slow flow" was the name given to the times when tweens relax, watch television and talk on the phone.

**Good (and bad) vibrations**

"Insecurity" emerged as one of the most important vibrations with tweens, reported Laurel. They worried specifically about having the most up-to-date cellphone, being in style, or having a good skateboard – all the outward visible signs of social status. In addition, they showed a great deal of frustration and a feeling that the world is unfair. The "pressure" vibration related to having to perform on time, getting up early, being always under pressure to get good grades, and the non-stop pace of modern life.

Finally, the "comfort" zone was almost always experienced in their bedrooms, or through using a mobile phone or SMS, or even playing or messaging on a computer. Tellingly, Laurel's researches found that, when tweens were asked to give words that described technology for them,

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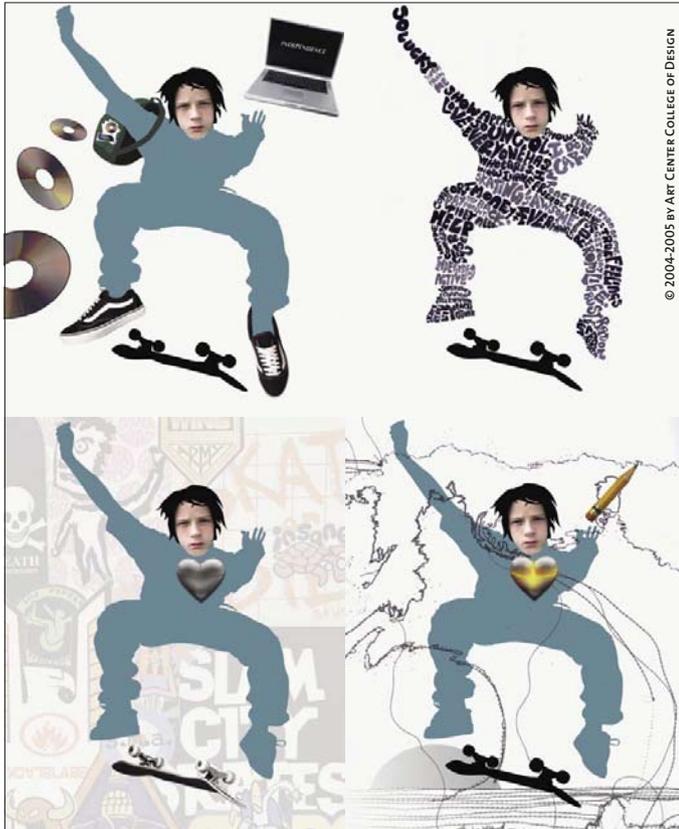
PERSONAS TO REPRESENT CLUSTERS OF TRAITS, FOUND AMONG THE SUBJECTS



Scenario

without exception the words they chose were positive. "Technology for them is comfort," she concluded, explaining how they use it (in all its forms) to stay connected with friends.

Another aspect of the project, Laurel explained, involved personas, which her team attempted to realise more solidly than usual, by building them in layers of translucent paper. This method allowed them to make visual correlations between the different layers of the persona – the social layer, the technology layer, the aspirational layer, and the layer of inner thoughts and beliefs.

Laurel cited the example of "Jake", a skater boy, whose social layer was determined by his skateboard. The skater boys in the group, Laurel noted, tended to be individualists with surfer aspirations, gentle, and respectful towards their parents. In contrast, the "ballers" – as they call themselves - are boys who are into team sports, who are more likely to become soldiers or executives. Laurel characterised these two types as "two versions of alpha maleness".

Having now developed tween realities and reality maps, vibrations and personas, the research group could formulate scenarios using a graphic novel format. According to Laurel, "the worst scenarios I've ever seen are the ones where everything goes right. If there isn't a failure mode, if there is no accident or mess in the scenario, then it is a bad scenario. There needs to be a surprise, there needs to be some delight, and there needs to be a failure. "

TOOL FOR STRUCTURAL ANALYSIS OF THE TWEENS

## Axes to grind

As a final summary of the reseacrh findings, the group developed a tool for structural analysis that views its study population suing a number of axes. Laurel demonstrated a two-dimensional analysis of tweens in which the x-axis ranged from comfortable to uncomfortable, and the y-axis ranged from social to solitary. She then pointed out that all the products currently being developed for tweens are at the social end of the spectrum.

"But what about this space here, the solitary, uncomfortable space?" asked Laurel, addressing the opposite, uncommercialised, end of the axis. To usefully invent a product for tweens, she continued, it was necessary to "find the void" – the unaddressed problem that needs a solution. For tweens, stress is a clear void, and there are few products designed to help them manage it. In response to this conclusion, the design students created MOBO, a handheld stress-relieving object that reflects two key findings of the research. The first was that when kids talked about their own room, they talked about it not as a place, but as an object. The other finding was their assessment of technology as a comfort.

Most importantly, MOBO actively pays attention to the tween, and it belongs to them only, as it is activated by the owner's thumbprint. Seeming to cross that fascinating boundary between organic and techno, it has a heartbeat that sychronises with the owner's. MOBO is a handheld device made of tactile material and containing an LED array, an accelerometer, a gravitometer, and a sensor that reacts to squeezing and pressure. Therefore it can respond to indicators of mood, for example changing colour according

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Design and the growth of knowledge

THE MARKETING MATERIALS FOR THE MOBO TAP INTO THE FASCINATION WITH
AMBIGUITY

to the speed of movement, or vibrating (analogous to a cat's purr); several MOBOs in the same place can respond to each other, by turning the same colour. For the branding and advertising, Laurel added, it was natural to tap into the fascination with ambiguity, the, "Is it alive?" notion.

After present a commerial the students made for the MOBO, Laurel summarised the process succinctly: the design of findings led to the creation of tools like personas, vibrations and reality maps. The tools were then recombined to make scenarios. These were then analysed to "find the void" based on structural analysis.

Finally, she pointed out that any research on any population can be used for anything: "We could have made something really nasty for these guys, something that would play on their insecurities and their stress, but instead we chose to make something, delightful, something that might also address some real issues in their lives," she said. However, she ended the presentation by returning to the initial point: that human-centered and design-centered research can indeed live happily together – with the whole being more than the sum of its parts.