

See the World with different Eyes

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those things that give a society its special character are often turned into clichés. In Germany, for example, one knows that the Japanese are diligent workers, live in crowded cities and in tiny apartments and are always looking for the latest technical gadgetry, unusual fashion and design ideas.

What is undisputed is that the high population density in Japan presumes a lot of discipline for a functional co-existence. Japan is considered a conforming society where the collective is more important than the individual. Japanese discipline and consideration are not just clichés.

Even in the overcrowded streets of a metropolis like Tokyo there is no shoving, and if someone comes to work with a cold, he will wear a mouth guard to prevent infecting his colleagues. Here the collective has a higher priority than the individual. This difference already originates in the philosophy: While Descartes' "I think, therefore I am" underlines the role of the individual in the West, the individual is constantly seen as a part in a larger whole in the Asian world perception. For every fact or opinion, the contrary position and overall context are always considered: just like with the two opposite poles Yin and Yang, which represent the male and female but still belong together. Germans, however, tend to take individual facts as the foundation of their opinions and observe everything primarily from their own perspectives. They also tend to represent their opinions directly, whereas the Japanese striving for harmony lends itself more to communicating between the lines.

The differences between Japan and Germany are also shown in the street appearance and media communication: Japanese streets are so crammed with glowing, blinking and visually glaring advertising surfaces that a German may have a hard time recognizing the traffic signals in this ocean of light. This leads to the suggestion that there may also

be differences between Japan and Germany when it comes to the perception of Internet pages.

Other countries, other usability

In such different countries as Germany and Japan there are different user standards and perception patterns for websites, as can be expected. This is due to the specific cultural attitudes as well as the respective writing systems and the direction of reading. In Germany, 26 letters that are read from left to right are sufficient, whereas Japanese includes more than 2,000 characters that can also be arranged vertically. Western companies that want to be successful in another cultural environment such as Japan are therefore faced with the challenge of developing their website for the global market on the one hand while on the other hand adapting the user interfaces to local needs. Other culturally specific user habits require country-specific adaptations to guarantee a user-friendly website. But how exactly is the online behavior of Japanese and Germans differentiated? Do the cultural differences that exist in many areas of life between Western and Asian countries also have an effect on the usage of a search engine or a booking website? Or do Japanese and Germans have similar needs in terms of websites, contrary to all expectations?

How is usability measured?

The market research institute eye square has pursued these questions with a methodology that is psychologically based and has already been tested in practice for nine years. Usability, meaning the user friendliness of a website, is researched at eye square with different user-centered methods. One of the qualitative methods is thinking aloud; this means that the users themselves directly comment on their process during surfing, but also in-depth interviews with trained psychologists and remote usability studies that are conducted online give indica-

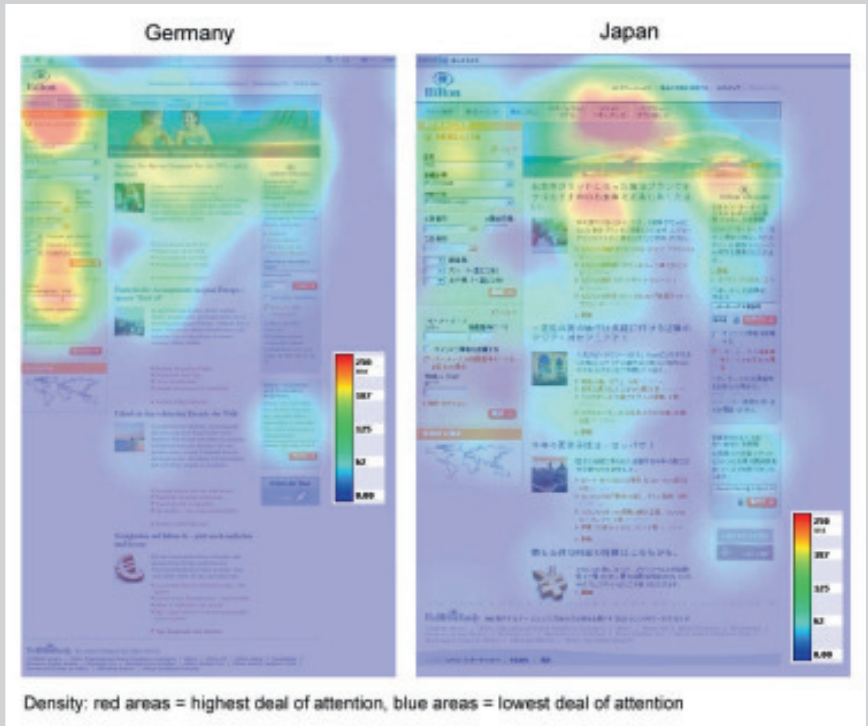
Anyone who has ever traveled into another country can report of different habits, rituals and customs. Everywhere in the world, the rules of everyday life are a little different. Exactly

tions of how a user deals with a webpage. Special insights into user behavior are produced by eye tracking, in which the viewing process of the test respondents is recorded along with the surfing behavior. The i²-Visualizer software by eye square can show, for example, which parts of the webpage received particular attention among the users and which were ignored. In addition, other statistical data are gained from questionnaires and ratings. Through these combinations of methods, the expectations, desires and requirements of the users can be depicted with the inclusion of the unconscious processes as well. The goal of these usability studies is to increase the satisfaction of the users, reduce the users' operational efforts, intensify the customer loyalty to Internet offers, minimize the production and design costs of websites, and, last but not least, guarantee the economic success of a web presence.

Japan and Germany in a direct comparison

In a cultural comparison study, eye square observed in cooperation with the Japanese company Mitsue-Links how 15 Germans in Berlin and 15 Japanese in Tokyo surfed on the websites of *Dell*, *Hilton*, *Kijiji*, and *Yahoo*. The test was divided into free exploration and a task-based usability testing. The object of this test was to determine how the Japanese and Germans react to different websites in practice, which differences and concordances there are in the usage and how the Internet pages can be coordinated specifically to the respective requirements. The test persons were between 18 and 32 years old and had a medium to high amount of Internet experience. The respondents included professionals as well as students. During the web usage, the comments of the respondents, a video image and the eye movements were recorded. The exploration phase of the websites was followed by an interview and questionnaires. The first question in the study was: Does the website of the Hilton hotel chain (www.hilton.com) correspond to

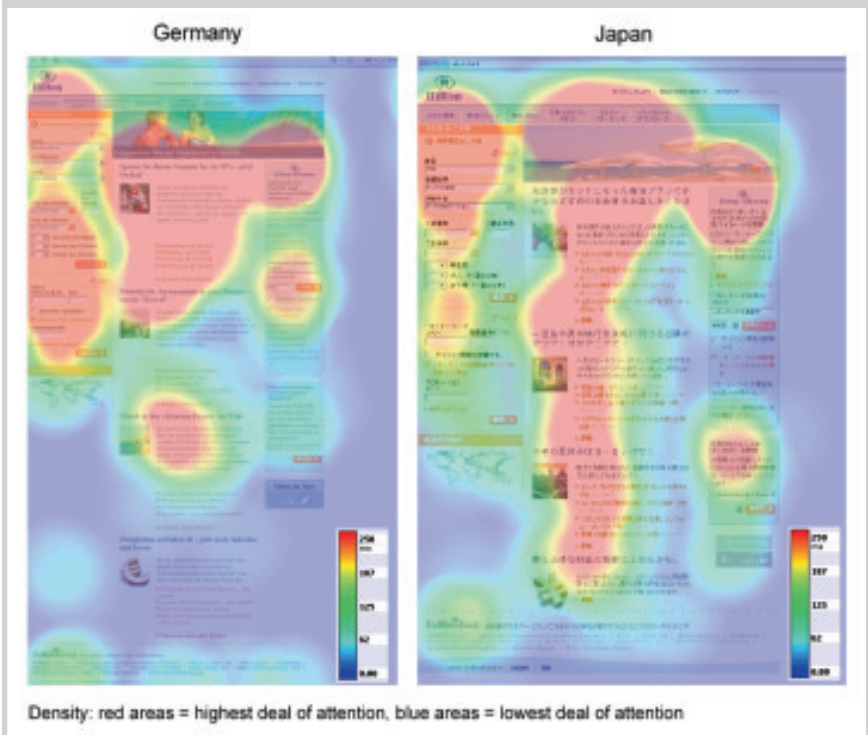
Hilton website: distribution of attention after 5 sec. of free exploration



the taste of the Germans and Japanese? The arrangement of the website Hilton.com is identical in Germany and Japan; in both countries it is highly structured

and clear. Even in the first five seconds of usage, it was possible to determine through eye tracking that the German respondents paid greater attention par-

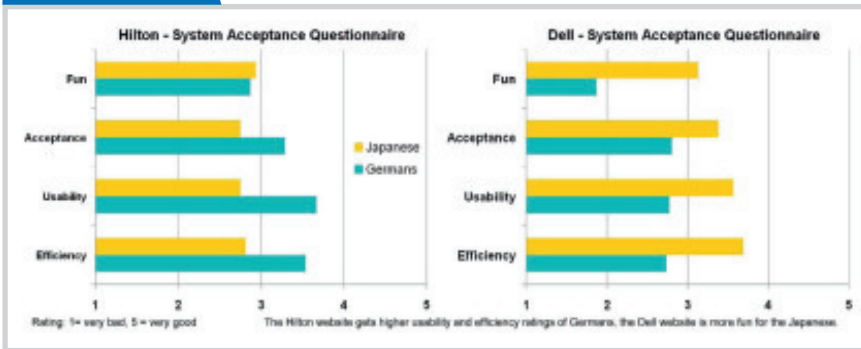
Hilton website: distribution of attention after 15 sec. of free exploration



Abstract

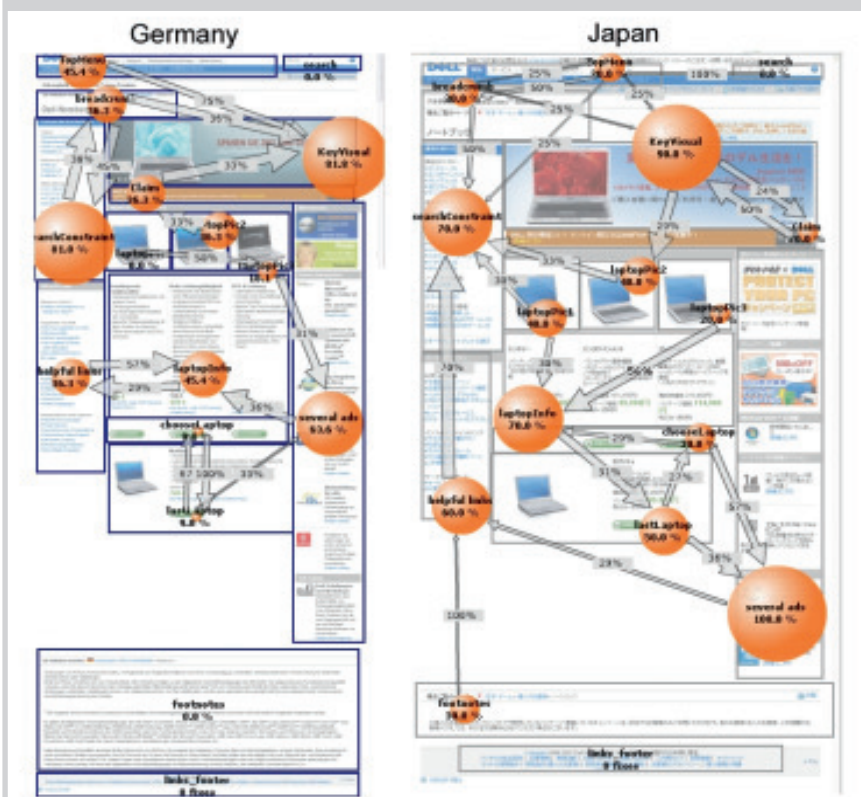
Cultural differences between Western countries and Asia are fairly obvious in everyday life – a handshake or bow as a greeting, the belief in one god here and pantheism there. This raises the question whether there are also differences in respect to the Internet: Which patterns of perception and design preferences are shown among Japanese and German Internet users? In a culture-comparing usability study with Japanese and Germans, the user behavior and the preferences of fifteen German and Japanese Internet users each were tested. The results indicate the necessity of intercultural usability studies for global websites, because only then can it be guaranteed that the design and the arrangement of the website corresponds to the local user habits and requirements, and that the Internet offer is commercially successful.

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Dell website: revisits and transitions after 15 sec. of free exploration



Revisits: The circles show the rate of subjects recurring to this Area of Interest. Transitions: The arrows mark the transmission of attention over different Areas of Interest. Japanese distribute their attention over the whole website, while Germans focus on selected areas. The Japanese show a higher probability of transition share.

ticularly to the bookings area (see figure 1). In contrast to the Germans, the Japanese had already explored the entire page after 15 seconds and had perceived all areas with equal intensity (see figure 2). Overall, however, the German users felt more addressed by the usability and efficiency of the Hilton website than the Japanese users (see figure 3).

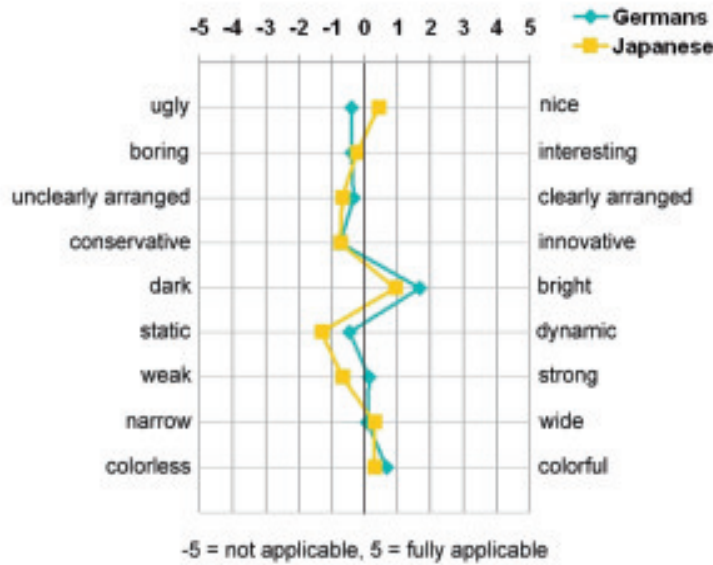
Is less more or vice versa?

The second task of the test was to look at the *Yahoo* website, which has country-specific versions for Germany and Japan. The eye tracking data captured by eye square showed a more intensive occupation of the Japanese with many different parts of the webpage. But for the German clientele, *Yahoo* was too unclear. "Too colorful, bright colors, too much useless content", the respondents commented in the interview. More pragmatic websites such as e.g. *Google* have greater success in Germany.

The website by the computer manufacturer *Dell* does not offer any pages that are specifically designed for particular countries, in contrast to *Yahoo*. The test revealed that – similar to yahoo.jp and hilton.com – the Japanese distributed their attention more evenly across the website after only five seconds, whereas the attention of the Germans focused more strongly on one area. After 15 seconds, the Japanese had already intensively explored the entire page, i.e. they observed more areas of the website in detail than the Germans (see figure 4). In addition, the Japanese ranked the appearance of the *Dell* website much more highly than the German users – what was a pleasure to the Japanese was a frustration for the Germans (see figure 4).

Nonetheless, the country-specific design of websites does not automatically mean success, as the Internet appearance of the classified ads portal *Kijiji* showed: Although the presentation of the ad classifications is designed differently in Germany and Japan, the German and Japanese users spontaneously agreed in the test: "This page is unclear! Where is the

Kijiji – semantic differential



The evaluation of the Kijiji website is almost similar in Japan and Germany.

global search? Oh there, what a dumb placement, the page is much too crowded”, is what was heard in Berlin. And in Tokyo the participants in the study also stated: “I don’t understand this entire Kijiji site and it’s annoying that I can’t search how I want” (see figure 5).

This proves that country-specific websites do not necessarily have to lead to a higher user acceptance. Still it can be determined that the Japanese and Germans actually perceive the world and therefore the Internet too with different eyes. The pages of *Dell* and *Yahoo* were perceived more quickly as a whole, i.e. in the overall context, in Japan, whereas the attention on individual objects was shorter. Overall a larger number of objects was viewed than in Germany. The Germans took longer to capture the entire site but the most important objects were focused on longer, although a total of less parts of the website were perceived and more time was spent on a particular feature.

In the survey, the German respondents evaluated the highly fragmented pages with many different contents by *Yahoo* and *Dell* less positively, since these were too colorful, too crowded and unclear to them.

The Japanese, however, clearly had

more fun than the Germans while surfing on exactly these websites and also ranked the usability and efficiency higher. The Germans consistently preferred the more structural page by *Hilton*.

The conclusion of the tests: The cultural differences also come out during surfing.

The Japanese are used to complexity through their writing system and visually oriented culture and like to see things in their overall context. For that reason they can also be confronted with more content on the Internet than German users. For German users, however, webpages should be kept rather simple with a clear and prominent placement of the most important things, since they prefer to concentrate on an individual aspect that is important to them.

Considering cultural codes

Such international tests are indispensable for globally operating companies that do not want to limit their country-specific web presence to a translation but want to adjust it to the cultural characteristics of the individual countries. The design, image and photo selection, wording and information architecture should be examined for all

countries and adapted to the respective culture. The Japanese-German comparison shows that websites should not just be transferred into another language but designed according to the perception patterns of the users. Intercultural usability testing provides insights about the online habits of the users in different countries and thus helps with the implementation of locally adapted versions of a global website. Because whether a website is accepted and used with pleasure also depends on factors such as taste (preferences for design and color choice), viewing habits, the background of personal experiences and expectations, which are strongly characterized by the culture in which one has grown up.

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