Chapter 8
Kansei Experience: Aesthetic, Emotions and Inner Balance

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ABSTRACT
Deliberate exploitation of natural resources and excessive use of environmentally abhorrent materials have resulted in environmental disruptions threatening the life support systems. A human centric approach of development has already damaged nature to a large extent. This has attracted the attention of environmental specialists and policy makers. It has also led to discussions at various national and international conventions. The objective of protecting natural resources cannot be achieved without the involvement of professionals from multidisciplinary areas. This chapter recommends a model for the creation of knowledge-based systems for natural resources management. Further, it describes making use of unique capabilities of remote sensing satellites for conserving natural resources and managing natural disasters. It is exclusively for the people who are not familiar with the technology and who are given the task of framing policies.

INTRODUCTION
We spend a significant amount of time interacting with Information and Communication Technology (ICT), using mobile phones, desktop computers, game consoles and so on. As a result, Human Computer Interaction (HCI) nowadays has shifted its approach from a focus on the computer, originally a scarce resource, to a focus on the user, and the merging of information and communication technologies. It has evolved into being about the user and what an ICT system can deliver to him/
We are convinced that now is the time to look further and assess the user gains, from ICT usage, in terms of experience and affects. Thanks to Cognitive Informatics (CI), there has already been some work in this area with the study of the user internal information processing of the brain (Wang, 2007). CI has focused on the relationship between information, computer science and mathematics on the one hand and neurobiology, cognitive science and psychology on the other hand (Wang, 2003). CI studies the way ICT users process internally information. However there is no strong emphasis on the experience user gain from such processing. We would like to go further, as we believe there is now a need to address the affects such process has on ICT users. There is a need for an experience that stimulates and triggers some cognitive functions with a strong affect their beholder. The most relevant cognitive functions, in this context, are: reflexes, sensations, thoughts, dreams, emotions, moods, and drives. These functions can be ordered according to their life-span (see Figure 2, note that this is a simplified description of these functions). The functions at the short end are triggered and running before we become aware of them. The functions at the other end are what make us ourselves and we are aware of them most of the time via introspection and retrospective analysis. As for the cognitive functions in the middle range, these are the functions that we are mostly aware of while they emerge in our mind and then disappear.

We have used this simplified list of functions during the implementation of a new interaction we have proposed called Kansei Mediated Interaction (KMI). That is because these cognitive functions are strongly associated with different systems in our body (brain, spinal cord, somatic system, autonomic system, endocrine system, and genetic system in Figure 3). In turn, these links help us design the right interaction (challenges, stimulus, body intakes, behaviour, sex in Figure 3) through various body parts and control systems. To achieve KMI, we have proposed to implement the user interface interaction using a combination of channels and medias exploring these links between cognitive functions and body systems (e.g. narrative, actuators, drinks, day long event in Figure 3). In this example we focus on the implementation of KMI within entertainment systems.

Our conviction of a need for ICT usage to be an enriching experience, an experience that yields positive affect, better feelings and enhanced inner

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**Figure 1. Three interaction modes: Explicit, Implicit and Kansei**