An analysis of interactions in human

Life, Relationships

What is the term " interaction"? According to the definition from the dictionary, it can be explained as the situation when people or things respond or react to each other. In the design aspects, Richard Buchanan stated that interaction is the relationship between users and products. In a word, the function of one object can be seen as a key component of interaction. For example, one of the functions of a smartphone is sending messages, while using a phone to send messages is the main way of people interacting with the phone.

From the Human-Computer interaction view, the interaction between computer and users is based on the feedback loop. The feedback loop means transit of information through the whole system. Generally, the first step of the loop is triggering activations. Then the mechanism responds with reactions, users can compare the reactions with expectation and optimize the next actions or the loop. Which means the information loop starting from the system, running through users and back to the system. (Dubberly, Pangaro & Haque, 2009).

The system of interaction design can be static or dynamic, I am aiming to design dynamic interaction system which can act and responds to outside factors. The outside factors are various, maybe sounds, temperature or even humidity. My initial plan is designing a public pavilion allowing people passing through or stopping for a while to feel the movement of the pavilion. This pavilion can be built in a Botanical Garden, surrounded by various plants. Thus the users of it are tourists including people of different ages, considering the visitors include the elderly and youth, the movement of the pavilion cannot be breathtaking or too fast. Hence, the reaction of the

pavilion design is slow and tender. The general design idea is inspired by Mimosa's characteristic that when people touch the leaves of it, this sensitive plant will close the case. The reaction is unique and interesting, so I want to apply the similar open and close movement to the pavilion skin. The static pavilion's skin is " open", speaking a welcoming message to visitors, however, when passengers touch the sensors on side walls, the pavilion skin will fold like square origami. This movement takes a few seconds, from static to dynamic and back to the static pavilion.

According to the definition of the linear and closed loop, my pavilion interaction design is linear which is open loop. The automatic supermarket door driven by a sensor or a motor is an example of using the linear system. When the first system act, it will push the second system to respond to the behaviors of users. This system can only react with the demand, it can not upgrade or improve the system by itself. If adding the self-regulation process, this system might be able to adjust the movement with learning from outside directions or environment. This can be discussed in further exploration.