**Further Discussion: Critical thinking as a problem-solving process**

From the text, *Basics Architecture 03: Architectural Design*, by Jane Anderson, published November 1, 2010:

“It is far better to ask difficult questions at the beginning of the design process than to build your mistakes. It is important to ask how critical judgment is learned, because it is a technique so central to architectural design….

The difficulty with critical judgment as a method for decision making is that it is not a transparent process and it is only as good as the individual architect, their imagination

and their ability to learn from their mistakes….

Architectural design requires the solution of complex problems. This is central to an understanding of the design methods, processes and approaches.

(Refer to Horst Rittel’s definition of ‘tricky or wicked’ problems, which have no definitive solution.)

There may only be one opportunity to provide a solution (because the next time the problem will be different; in architecture there will be a different site,

brief, budget or client) and so it is impossible to definitively compare the quality of that solution with another.

In addition, if an architect made a comprehensive study of every option available for every small decision in order to solve the bigger problem, there would be no time to act. The benefit of action far outweighs the negligible benefit associated with (more possible solutions).

There is one particular device that the architect uses to counteract the absence of one right answer in architecture. This is the ability to make critical judgments. Critical

judgment is a term much used in architecture schools. It should not be confused with ‘criticism.’ Critical judgment is a way of thinking; it helps architects to make decisions about how to solve architectural problems. It is the ability of an architect to question their own decisions, willingly and openly and compare them to the other possible decisions that they, or their collaborators, can imagine.

Critical judgment is a product of an architect’s core values, knowledge, training, experience, aesthetic preferences and current thought. It is reflective, reactive, contextual and pragmatic.