

design teams (Cross, Christiaans, and Dorst 1996). This knowledge was diversified and deepened through the research of Rianne Valkenburg (2000), Remko van der Lugt (2001), Frido Smulders (2006), Christelle Harkema (2012), Bec Paton (2011), and others (see appendix 2 for the academic background story to the frame creation model). The Designing Out Crime initiatives in Sydney and Eindhoven then provided a real-world platform for rendering these research outcomes into a model, and for performing the first experiments toward the development of a methodology. All this knowledge and all of these experiences come together in the frame creation model (figure 4.1).

The nature of each of these nine steps will now be discussed briefly, followed by three case studies that will provide more details and a lively illustration of this fascinating new practice for achieving innovation.

ARCHAEOLOGY

The first step of the frame creation process is to investigate in depth the apparent problem, as well as earlier attempts to solve it. This analysis is crucial, as we need to delve deeply into the world of the problem owner in order to understand the past history of the problem. We investigate not only what happened but also what could have happened, what would have been different if they had chosen another path. If we didn't look at these alternative paths of action, we would run the risk of having our own perceptions caught in the same trap that led to the initial problem definition. This first step of "archaeology" also provides insight into the role the problem owner has had in creating the problem situation, and it gives a first impression of the dynamics of the organization over time. The analysis of the flux and potentiality of movement in the world of the problem owner should be balanced by an analysis of the hard, nonnegotiable boundaries ("They will never ..."). These nonnegotiable issues are important to know, as they will also limit the creation and adoption of new frames and solutions later on in the process. This broad-ranging archaeological analysis can be quite a lot of work, but seasoned professionals will quickly spot the strengths and pitfalls in the organizational setting of the problem.

PARADOX

Once the succession of actions that led to the problem situation has been defined and there is a clear understanding of what drives the organizational behavior of the problem owner, we move on to investigate the initial problem definition itself. The lead question is: What makes this problem hard to solve?