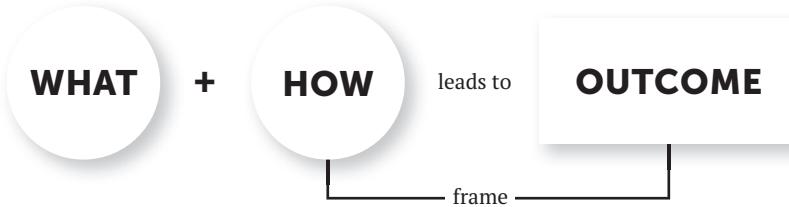


HOW DO DESIGNERS APPROACH A PARADOX? ON FRAMING



In questioning the established patterns of relationships in a problem situation, design abduction creates both a new way of looking at the problem situation and a new way of acting within it. This comprehensive new approach to the problem situation is called a “frame” within design literature (see Schön 1983, and appendix 2). Expressed in terms of the concepts in our logical formula, a frame is the proposal through which, by applying a particular pattern of relationships, we can create a desired outcome. If we go back to the earlier example, the problem of creating an energy rush at the start of the work day, then the choice of a chemical stimulus (caffeine) as a way to feel energized is the frame, the approach to the problem. But this problem might be reframed by proposing that there are also social ways of being energized (by an inspiring conversation), or by delving deeper and saying that what we really are looking for is not so much the energy rush, but a level of concentration—in which case, meditation would be a way to achieve the clarity of mind that is otherwise achieved by drinking coffee.

We call the act of proposing such a hypothetical pattern of relationships “framing.” Framing is the key to design abduction. The most logical way to approach a paradoxical problem situation is to work backward, as it were: starting from the only “known” in the equation, the desired value, and then adopting or developing a frame that is new to the problem situation. This framing step is intellectually similar to induction: after all, we have seen that in inductive thinking a pattern of relationships is also proposed and tested. Once a credible, promising, or at least interesting frame is proposed, the designer can shift to normal abduction, designing the element that will allow the equation to be completed. Only complete equations with “elements,” “pattern of