Core elements of design work include the development of problem/solution understanding, as well as information and knowledge sharing activities. However, their interrelationships have been little explored. As such, this work aims to take the first steps towards a more integrated evaluation and description of the interaction between understanding and activity, based around co-evolutionary transition events; and start to answer the question: How can the link between co-evolution and activity be systematically characterized as a foundation for a more fundamental description of design activity? A protocol analysis is used to provide the basis for characterization of different types of coevolutionary transition event. A number of distinct event types are described and significant differences in information use and team engagement are identified across transition events. Bringing these findings together, we propose a unitary model of the interaction between activity and understanding around co-evolutionary transition events. This has a number of implications for future theory building and testing in both design activity and wider design research.