Science is a quest to articulate that which is not known—to see more clearly the connections and relationships that exist in order to make sense of the world. Forensic science specifically endeavors to reconstruct past events by detecting and examining materials for insights into what happened. The pioneering criminologist Edmond Locard described these clues as “mute witnesses, sure and faithful of all our movements and all our encounters,” yet these clues are often fragmented and dissociated, and any attempt to theorize “the whole picture” must be cognizant of the gaps between them.  

John Baldessari’s 1982 etching portfolio *Black Dice* offers a number of intriguing parallels with the methods and limitations of forensic science. Each of the work’s nine prints derives from a section of a film still from the 1948 gangster movie *Black Dice* (a British film originally titled *No Orchids for Miss Blandish*). The sections were photomechanically reproduced and then reworked by the artist, isolating specific objects and details, highlighting them with color or hand-applied annotations—the faces of the actors disappear, while inanimate objects like a bedside lamp, a telephone, and a wall sconce are presented with clarity. The palimpsest quality of the prints—the sense of one kind of information lying beneath another—is akin to the recovery of exhibits from a crime scene. As time passes before, during and after a crime event, materials can be incorporated onto, or into, a clue. Alternatively, a clue can decay or diminish over time—a garment may shed its fibers, footwear may drop sediment particles. The
materials thus added or lost may or may not be relevant to a crime, but they become integrated within the clue, just as Baldessari’s post-facto erasures and overlays present a picture that derives from a past event, while also changing it. Forensic science evidence is not pristine; to understand what a clue is and what it means, we need to peel back its layers.

In dividing this cogent cinematic scene—woman in bed, man at door, another man crouching beside the bed, gun in hand—into nine parts, Baldessari invites us to see elements in isolation. The prints may be hung in a grid such that the composition is united, but they may also be viewed one at a time, lifted out of the box, in which case one has to imagine how each connects to the next. The portfolio box also includes a copy of the original film still, enabling the viewer to see clearly the starting event. In forensic science, however, it is rare to know the whole picture; instead we rely on inferences made from the key fragments that remain. We see in parts, and we infer the whole. In many cases, that whole can never be firmly established—it was a moment fixed in space and time that has now passed.

Film still from Black Dice (1948).

*Black Dice* is an invitation to reconnect and reconstruct partial, "snapshot" views into a larger whole. More than this, it illuminates the critical difference between seeing the attributes or value of pieces in and of themselves, and seeing the collective characteristics of a picture as a whole. In crime reconstruction each clue must be viewed through multiple lenses—some shaped by empirical data, others by experience and expertise. Only when all these perspectives are brought together is it possible to consider the whole and communicate the value of that finding.

In forensic science we may increase the resolution of a view through microscopy, or we may break a clue down into its constituent elements to determine its origins. Deconstructing a tangible clue that is visible may enable us to articulate a whole that is invisible and intangible. Increasing the resolution of images of mineral grains recovered from a shoe makes it possible to see the surface features of those grains, and to infer, for example, that the shoes have not been in one particular location, or cannot be excluded from having been in another. Identifying the chemical constituents of a trace residue as a specific type of explosive makes it possible to infer the type of device that may have been constructed. Every scale offers additional insights, to be fitted together.

When one clue fills our view, however, it is possible to mistake it for the whole—to infer too much from too little. Therefore, it is important to remain aware of incompleteness. If our quest is to articulate that which is not known, we
must be willing to identify voids as well as presences. Only when we have transparency about what is, and is not, possible to know at any given moment, can science contribute effectively to the justice system. Establishing which fragments are salient—analyzing each clue first in isolation, and then as part of a whole—is how forensic scientists give “mute witnesses” a voice; it’s how we “see” that which has become invisible. More broadly, the quest to identify the unknown, piecing together partial glimpses, and interpreting the interstitial voids is a universal human experience. In *Black Dice* Baldessari has given us pictures of that will to see the invisible.

2. Some types of evidence have historically been presented in court as if unequivocal, imbuing them with greater weight than is warranted, and leading to overreliance on their findings. This is particularly true for DNA evidence: it is not enough to establish that the DNA on a weapon belongs to a specific individual, we need to establish how and when the DNA got there. Was it during a criminal act or through innocent means?