

subtile chemistry than man now wields, these images shall take a place among obvious and permanent things in the universe, to the honour and glory of some, but to the amazement and everlasting contempt of more.

Of more, I say; for wickedness has oftener sought the concealment of darkness than modest virtue. The foulest enormities of human conduct have always striven to cover themselves with the shroud of night. The thief, the counterfeiter, the assassin, the robber, the murderer, and the seducer, feel comparatively safe in the midnight darkness, because no human eye can scrutinize their actions. But what if it should turn out that sable night, to speak paradoxically, is an unerring photographer! What if wicked men, as they open their eyes from the sleep of death, in another world, should find the universe hung round with faithful pictures of their earthly enormities, which they had supposed for ever lost in the oblivion of night! What scenes for them to gaze at for ever! They may now, indeed, smile incredulously at such a suggestion; but the disclosures of chemistry may well make them tremble. Analogy does make it a scientific probability that every action of man, however deep the darkness in which it was performed, has imprinted its image upon nature, and that there may be tests which shall draw it into daylight, and make it permanent so long as materialism endures.

There is another chemical principle, called *catalysis*, through which human actions may make powerful and permanent impressions on the universe, and that, too, unperceived by man. In some cases, the mere presence of a certain agent, in a small quantity, will produce extensive changes of constitution in other bodies, while the agent itself remains unaltered. Thus a strip of platinum will determine the union of oxygen and hydrogen in the platinum lamp; and sulphuric acid, in a solution of starch, will change it first into gum, and then into sugar; while neither the platinum nor the acid experiences any change. These are called *catalytic* changes. More often, however, the catalytic agent is itself in the process of change, and it produces an analogous change in other bodies. A familiar example is yeast, or ferment. This substance contains a principle called *diastase*, one part of which is capable of converting two thousand parts of starch into sugar; and this is what is done in the familiar process of fermentation,