Concept Question 11-5: Why does the reflected impedance  $\mathbf{Z}_R$  bear that name?

When the mutual inductance M is not zero, the impedance of the secondary circuit,  $(R_2 + j\omega L_2 + \mathbf{Z}_L)$ , becomes part of the input impedance of the primary circuit, enabled by the magnetic coupling represented by M. This dependence is akin to reflecting the impedance of the secondary circuit onto the primary circuit.