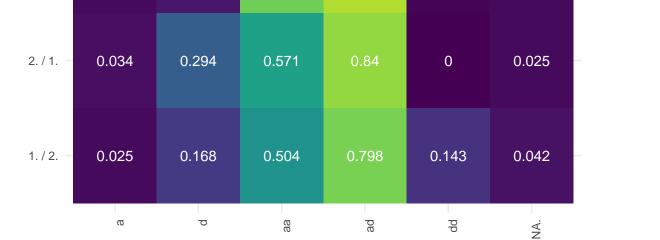Component Traits: aa & ad