The principally polarized Abelian variety determines the variety X so that we have a Torelli theorem – i.e., the Hodge structure of X determines the variety X.

Particular to the case $n=2$ is the Kummer surface $\mathcal{S}$ defined by taking the quotient of A by the involution $z \longrightarrow -z$, and which we have identified geometrically as the surface in $\mathbb{P}^3$ defined by the condition that the conic X_p of lines in the quadric line complex passing through p should be singular.

⌈ By P229, $j: A \longrightarrow \mathcal{S}$ is a double cover map branched at R.

$\mathcal{S} = \{ p \in \mathbb{P}^3 \mid X \cap \sigma(p) = X_p \text{ is singular} \}$, see P263 ⌋

The Kummer surface $\mathcal{S}$ uniquely determines A and hence X: If we desingularize $\mathcal{S}$ to obtain a K-3 surface $\tilde{\mathcal{S}}$ having a divisor $E = \sum_{i=1}^{16} E_i$ lying over the double points of $\mathcal{S}$, then the class of E in $H^2(\tilde{\mathcal{S}}, \mathbb{Z})$ is even so that we may construct a two-sheeted covering $\pi: \tilde{A} \longrightarrow \tilde{\mathcal{S}}$ branched over E.