Erratum to "Twisted Genus Bounds for Subvarieties of Generic Hypersurfaces"
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REFERENCES
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ERRATUM TO "TWISTED GENUS BOUNDS FOR
SUBVARIETIES OF GENERIC HYPERSURFACES"

By HERBERT CLEMENS and ZIV RAN

Our purpose is to give an improved, cleaner statement of part of the main result in [1].

The Main Theorem (Theorem 0.1, p. 91) is needlessly understated (and somewhat misstated). Formula (0.2), p. 91 should read

\[
(0.2') \quad h^0(\omega_Y) + 1 \geq \min (\dim (\text{span}(f(Y)) - k + 2, 4)).
\]

As a consequence, the exception allowed on p. 92, l. 3 is, in fact, excluded and we have established:

**Theorem 0.1 bis.** Any integral curve \( Y \) on the generic sextic 3-fold has geometric genus

\[
g(Y) \geq 3.
\]

The change comes from Lemma 4.2, p. 102 in which formula (4.7) should read

\[
(4.7') \quad h^0(\omega_Y(n + 2 - d)) \geq \min (p + 1 - k, 3).
\]

To see this, note that the foregoing argument on p. 101 shows in the general case where \( p \geq k \) that

\[
h^0(c_1(N')) \geq 1;
\]

if in fact \( p > k \), so \( \gamma \) is nonconstant, we get

\[
h^0(c_1(N')) \geq 2;
\]

finally in case \( p > k + 1 \), the image of \( \gamma \) cannot be a \( \mathbb{P}^1 \) in the Grassmannian, and we get

\[
h^0(c_1(N')) \geq 3.
\]
Putting these together and using, as usual, that
\[ h^0(\omega_Y(n + 2 - d)) \geq h^0(c_1(N')), \]
we get (4.7').

At this point, the argument on p. 102 applies as is. This argument, which is independent of the rest of the paper, shows that any plane curve \( Y \) on the generic sextic 3-fold has genus at least 4. Putting this together with the above (0.2'), we can state Lemma 4.3 p. 102 without the phrase "except possibly..." leading to the above improved statement of Theorem 0.1.

**Erratum.** On p. 109, l. 9, "\( > s \)" should be replaced by "\( < s \)."

**REFERENCES**