



cpp2

.Rros:

• Softtype, bounds, lifetime, initialization arithmetic

• incrementally opt-in

- Transpiles to C++ (still have the C++ code)

• Perfect interoperability*

Goins:

• Differentiating between/teach

• still infinity

• Lifetime safety not great

• Not threatened safety

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Type	Static type system
Bounds	Checked
Lifetime	Partially enforced/ checked
Initialisation	Enforced
Arithmetic	Checked
Thread	Tsan
Definition	Modules



cpp2

- **Pros:**

- Safer type, bounds, lifetime, initialisation and arithmetic
- Incrementally opt-in
- Transpiles to C++ (still have the C++ code)
- Perfect interop*

- **Cons:**

- Different language to learn/teach
- Still in infancy
- Lifetime safety not great
- No thread safety

Type	Static type system
Bounds	Checked
Lifetime	Partially enforced/ checked
Initialisation	Enforced
Arithmetic	Checked
Thread	Tsan
Definition	Modules



Type	Static type system
Bounds	Checked
Lifetime	Value semantics & Ref-counted
Initialisation	Enforced
Arithmetic	Trap/explicit behaviour
Thread	Enforced actors & sendable
Definition	Modules