

An attempt was made to constrain an associated type.

Erroneous code example:

```
pub trait Vehicle {
    type Color;
}

pub trait Box {
    type Color;
}

pub trait BoxCar : Box + Vehicle {}

fn dent_object<COLOR>(c: dyn BoxCar<Color=COLOR>) {} // Invalid constraint
```

In this example, `BoxCar` has two supertraits: `Vehicle` and `Box`. Both of these traits define an associated type `Color`. `BoxCar` inherits two types with that name from both supertraits. Because of this, we need to use the fully qualified path syntax to refer to the appropriate `Color` associated type, either `<BoxCar as Vehicle>::Color` or `<BoxCar as Box>::Color`, but this syntax is not allowed to be used in a function signature.

In order to encode this kind of constraint, a `where` clause and a new type parameter are needed:

```
pub trait Vehicle {
    type Color;
}

pub trait Box {
    type Color;
}

pub trait BoxCar : Box + Vehicle {}

// Introduce a new `CAR` type parameter
fn foo<CAR, COLOR>(
    c: CAR,
) where
    // Bind the type parameter `CAR` to the trait `BoxCar`
    CAR: BoxCar,
    // Further restrict `::Color` to be the same as the
    // type parameter `COLOR`
    CAR: Vehicle<Color = COLOR>,
    // We can also simultaneously restrict the other trait's associated type
    CAR: Box<Color = COLOR>
{}

```