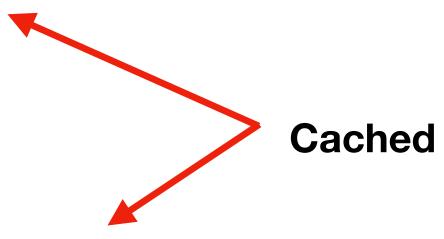


```
auto gain = 1.0f;
void realtimeThreadEntry()
    register auto gain_copy = gain;
    while (rocketFlying)
        // do some dsp ...
        for (int i = 0; i < n; ++i)
           sensorInOut[i] *= gain_copy;
    }
// called on another thread
void setSensorGain (float newGain)
    gain = newGain;
```





Anything can happen! (Including exploding rockets)

Undefined behaviour

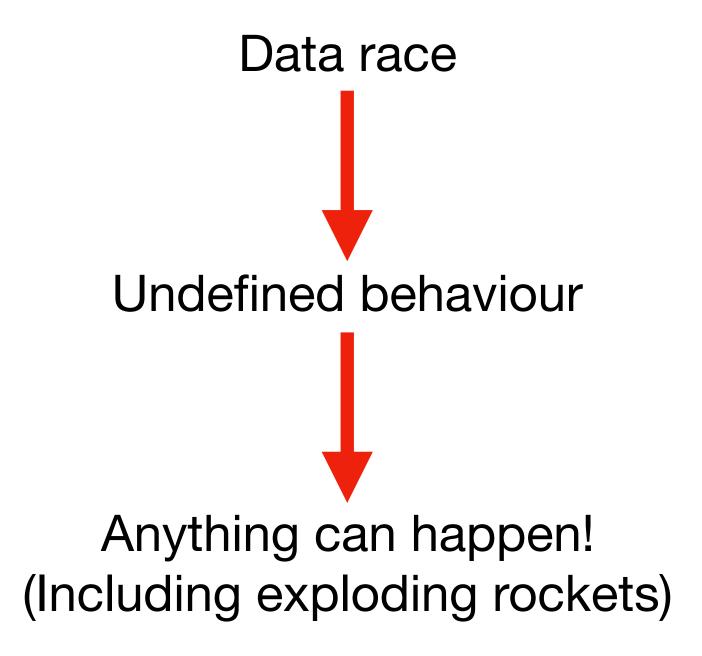
Data race







```
auto gain = 1.0f;
void realtimeThreadEntry()
    register auto gain_copy = gain;
    while (rocketFlying)
        // do some dsp ...
                                                   Cached
        for (int i = 0; i < n; ++i)
           sensorInOut[i] *= gain_copy;
// called on another thread
void setSensorGain (float newGain)
    gain = newGain;
                                                  No effect
```



How big is your data?

