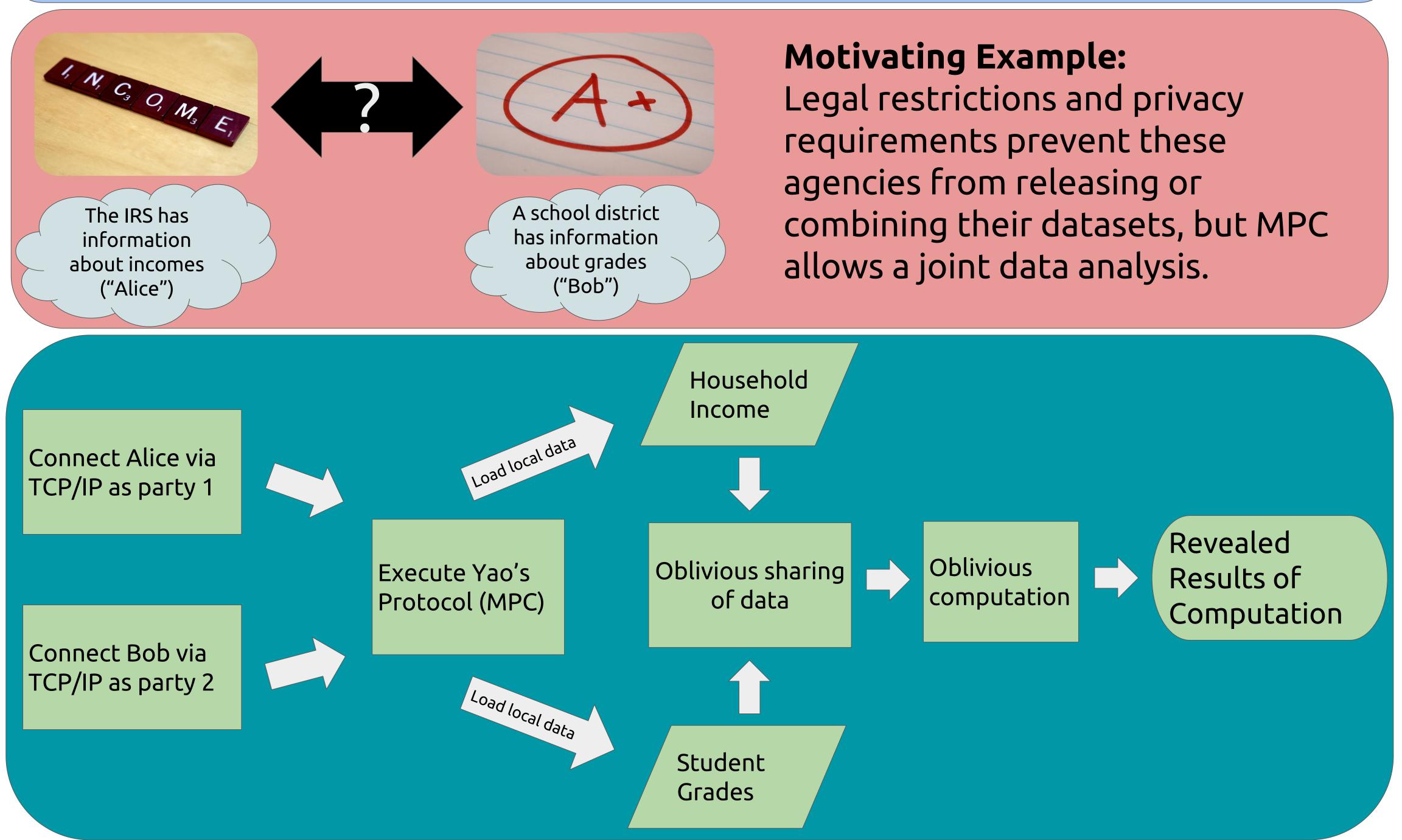


## Secure Multi-Party Computation as a Tool for Privacy-Preserving Data Analysis

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Social scientists often work with private datasets that cannot be shared due to legal restrictions, but secure multi-party computation can enable many interesting joint data analyses without exposing private datasets.



Obliv-C (http://oblivc.org) makes it simple to execute MPC over TCP/IP connections and fully integrate code with C tools:

```
for(int i = 0; i < n; i++) {
oArr[i] = feedOblivInt(iArr[i],party);
}
obliv int orsqr = getOblivRSquared(oArr);
revealOblivInt(&io -> rsqr,orsqr,0);
```

**Performance:** c4.large AWS EC2 nodes can carry out computation of 1 million data points in 127 minutes using Obliv-C. With current c4.large node costs, two parties can execute MPC on **10 million data points at a cost of \$4.45 in 21 hours**.

Get started developing MPC applications for social scientists: <a href="http://oblivc.org/tutorial">http://oblivc.org/tutorial</a>

