## Making Objects More Visible

- Objects are fundamentally opaque
- Data literals are fundamentally transparent

```
[{:name :Famine
   :weapons ["Scales"]}
{:name :Pestilence
   :weapons ["Bow" "Arrow"]}
{:name :War
   :weapons ["Sword"]}
{:name :Death}]
```

```
@Entity
public class Horseman {
    @GeneratedValue(strategy = GenerationType.AUTO)
    private Long id;
    private String name;
    private String[] weapons;
    @Contract(pure = true)
    public Horseman(String name, String[] weapons) {
        this.name = name;
        this.weapons = weapons;
    protected Horseman() {
    public boolean equals(Object o) {
       if (this == 0) return true;
       if (o == null || getClass() != o.getClass()) return false;
       Horseman horseman = (Horseman) o;
        return name.equals(horseman.name) &&
                Arrays.equals(weapons, horseman.weapons);
    @Override
    public int hashCode() {
        return Objects.hash(name, weapons);
    @Override
   public String toString() {
        return "Horseman{" +
                "id=" + id +
                  name='" + name + '\'' +
                  , weapons=" + Arrays.toString(weapons) +
    public Long getId() {
        return id;
    public String getName() {
        return name;
    public String[] getWeapons() {
        return weapons;
```

## Tools: VisualVM

