

PoV y SCENE

Por qué crear una Matriz 4x4?

```
public class Graph : MonoBehaviour {  
    [SerializeField]  
    Transform _pov = null;  
    public Transform PoV { get { if (!_pov) _pov = transform; return _pov; } }  
  
    public List<Vector3> vertex; ← en coordenadas  
    public List<Edge> edges;      locales  
  
    public Vector3 ToWorldPoint (Vector3 point) {  
        return PoV.TransformPoint(point);  
    }  
  
    public Vector3 ToLocalPoint (Vector3 point) {  
        return PoV.InverseTransformPoint(point);  
    }  
}
```

Dibuja Caminos entre vértices

```
public static void DrawEdges (Graph target) {  
    Matrix4x4 oldMatrix = Handles.matrix;  
    Handles.matrix = target.PoV.localToWorldMatrix;  
  
    for (int i=0; i<target.edges.Count; i++) {  
        foreach (int link in target.edges[i].links) {  
            Handles.DrawLine(target.vertex[link], target.vertex[i]);  
            CoolEditor.ArrowHead(target.vertex[link],  
                                target.vertex[link] - target.vertex[i],  
                                _buttonSize, _buttonSize);  
        }  
    }  
  
    Handles.matrix = oldMatrix;  
}
```

```
Handles.DrawLine(target.transform.position + target.vertex[link],  
                 target.transform.position + target.vertex[i]);
```

