

단면(Spline)을 활용한 모델링





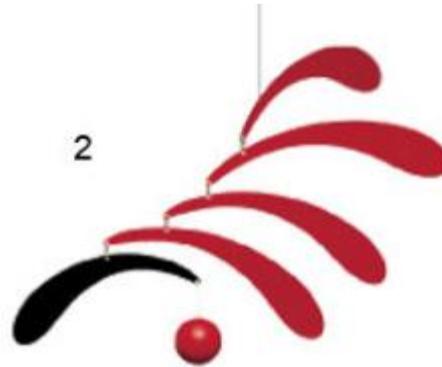
대상물이 가지고 있는 단면을 관찰

대상물이 가지고 있는 단면을 관찰



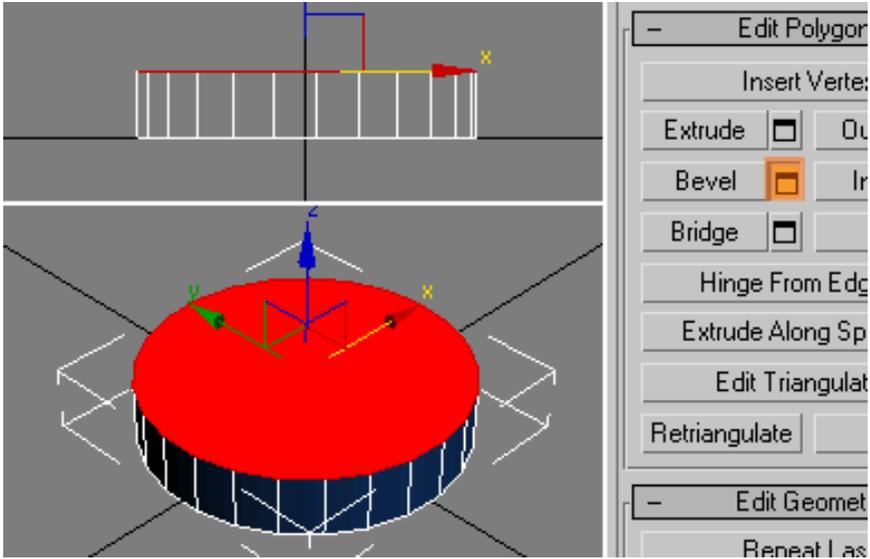


Super Premium Sound

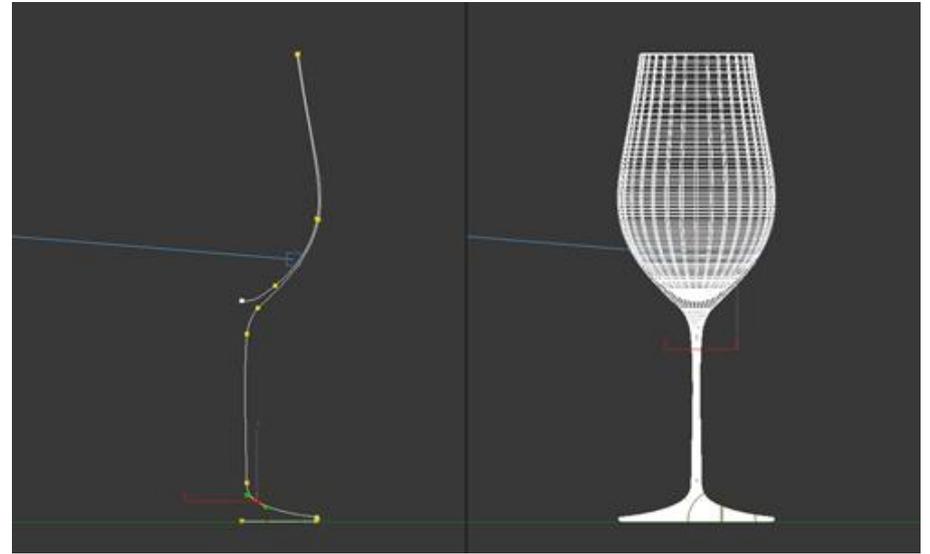


2

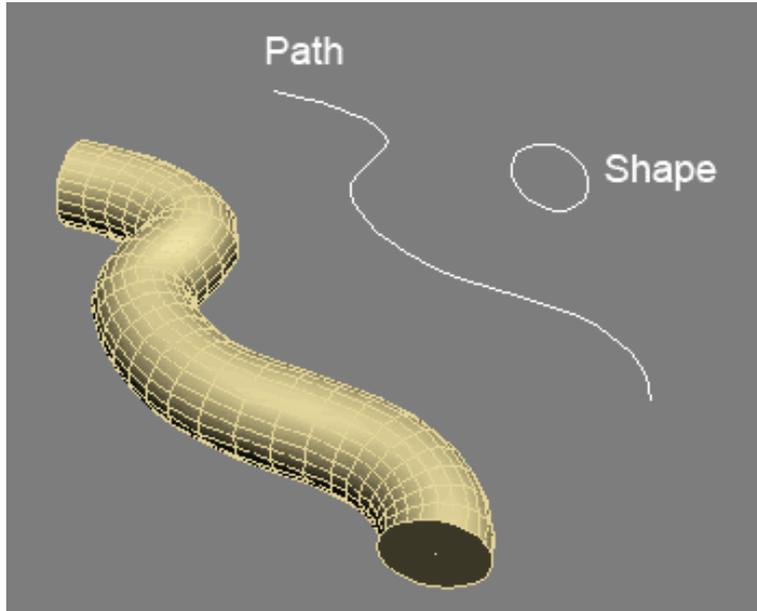
Extrude(bevel)



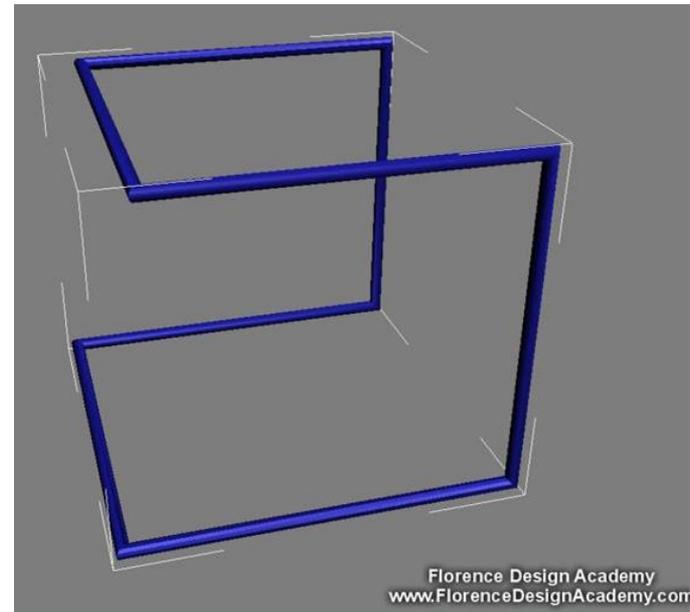
lathe

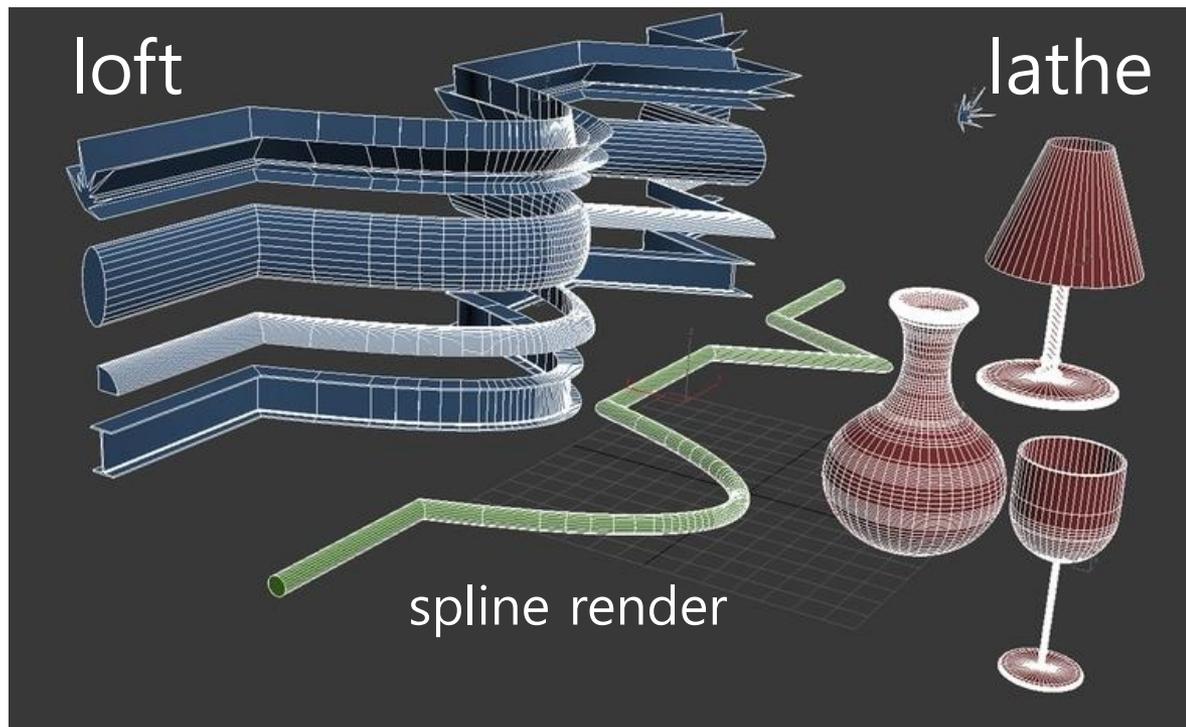
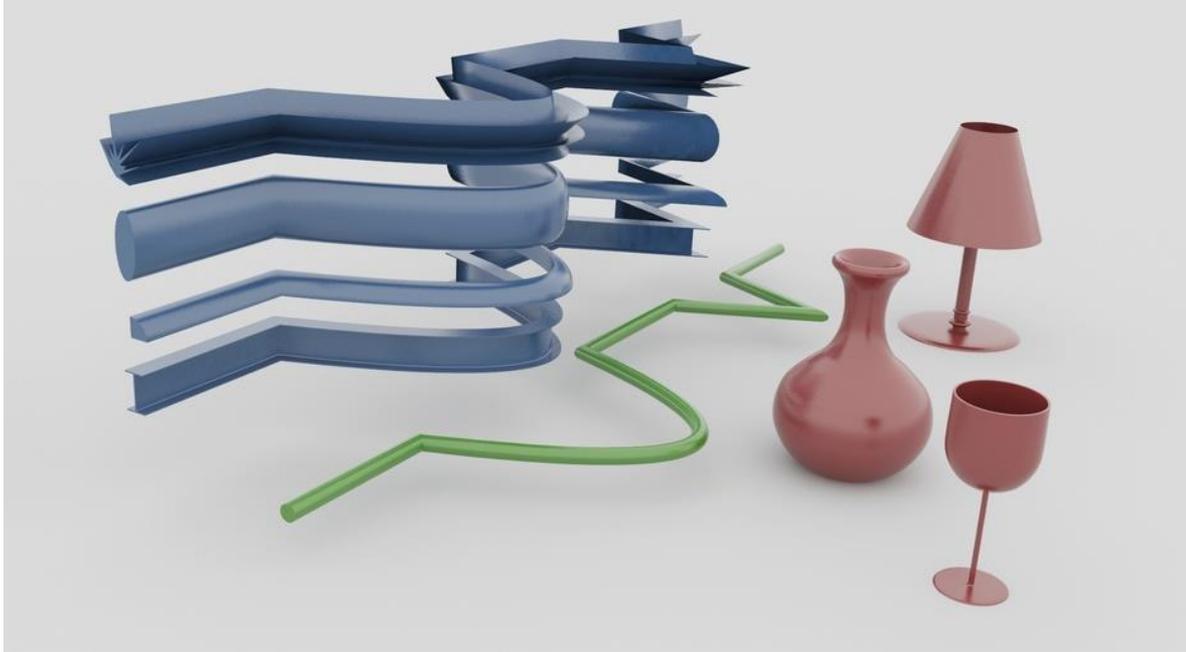


loft

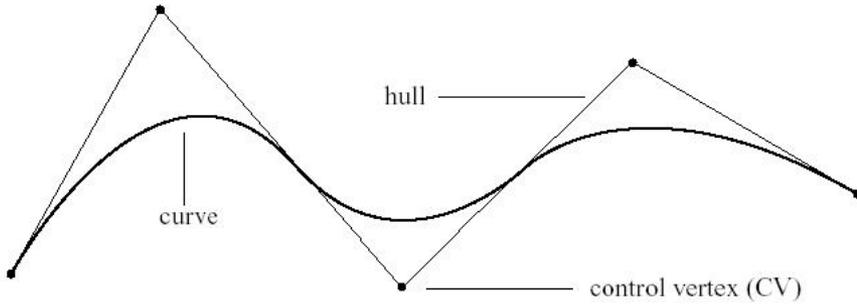


spline render

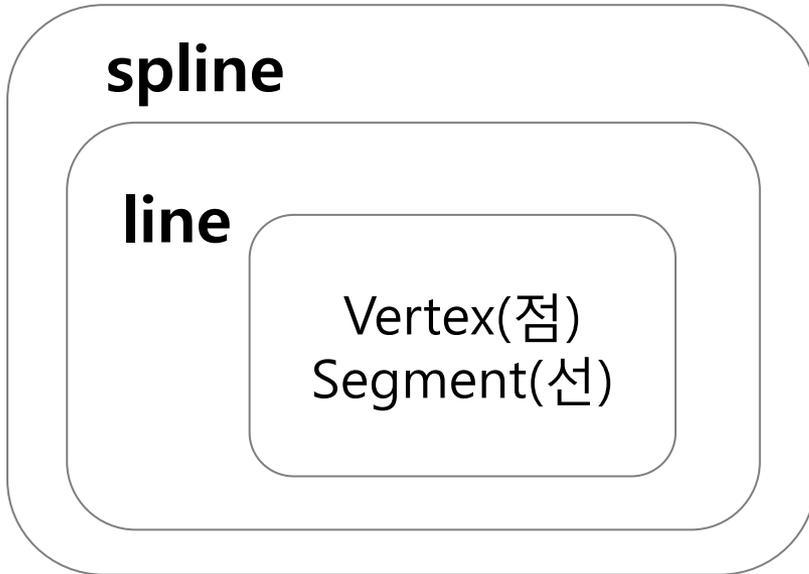




Line 과 spline 과의 차이



shape



Shape: spline으로 구성되고
닫혀져있는 형태

Spline: 조절이 가능한 점들을 가지고 있는
곡선이나 직선의 조합.

Line: 가장 기본적인 형태.

Spline 스플라인

모양은 하나 이상의 스플라인으로 구성된 오브젝트이다.

스플라인은 라인이나 곡선을 이루는 정점 및 연결 세그먼트의 조합이다.

정점을 이동하고 해당 설정을 조정하여 선의 모양을 바꾸고 일부를 곡선 또는 직선으로 만들 수 있다.

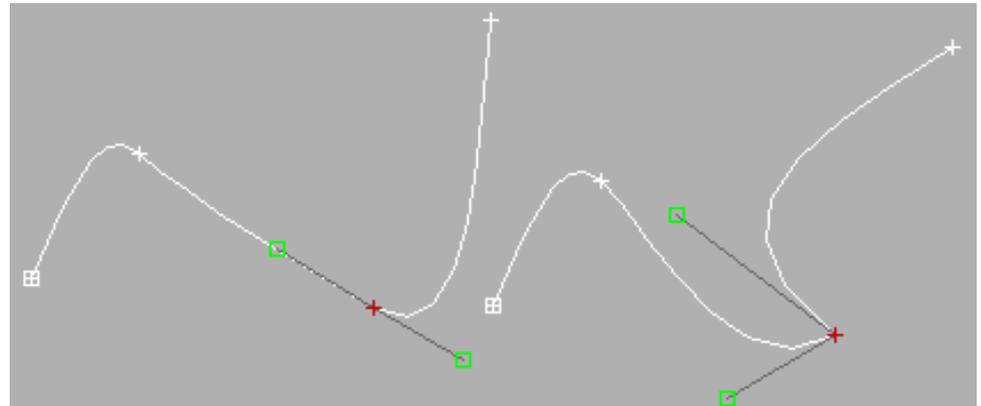
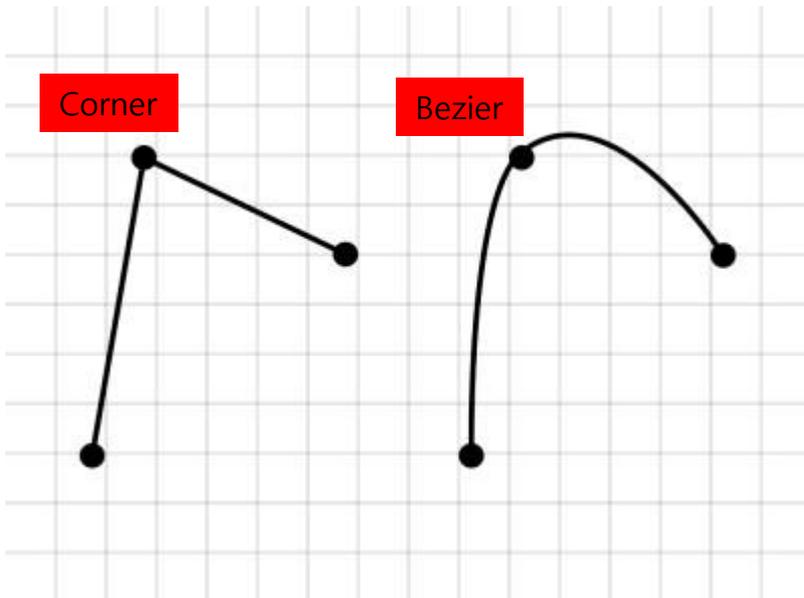


spline : Vertex 의 속성

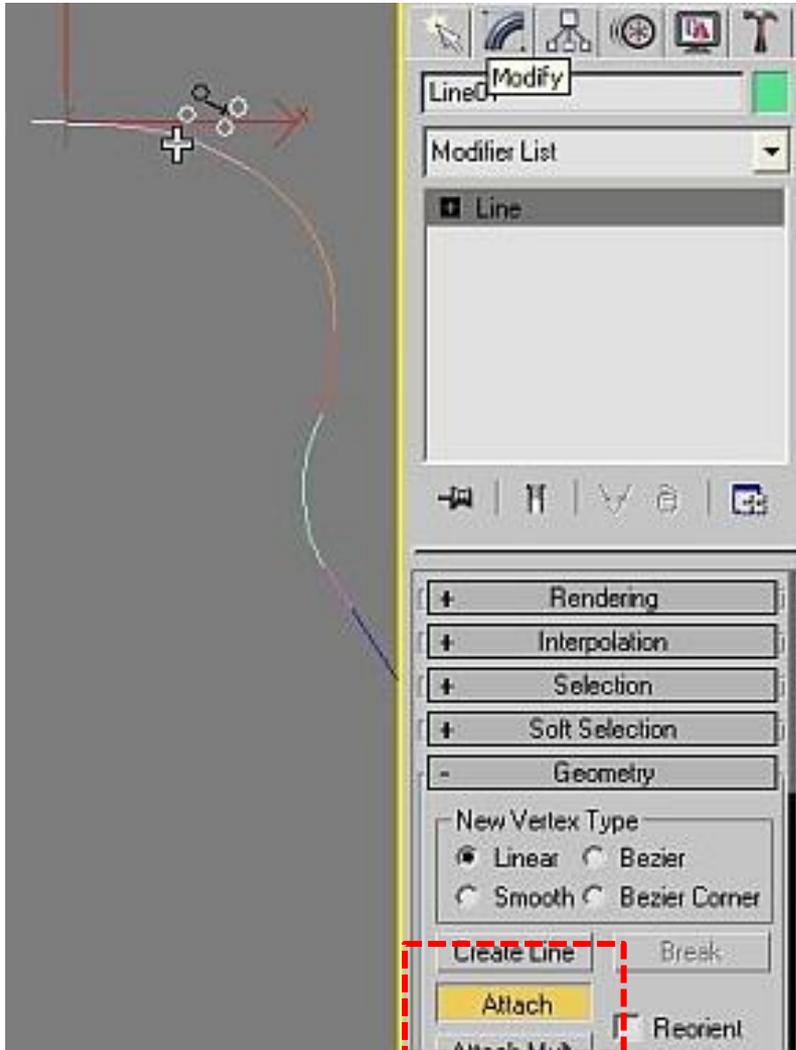
Corner: 직선

Bezier corner: 부드러운 곡선이며 한쪽만 조절할 수 있음

Bezier : 부드러운 곡선이고 양쪽을 같이 조절



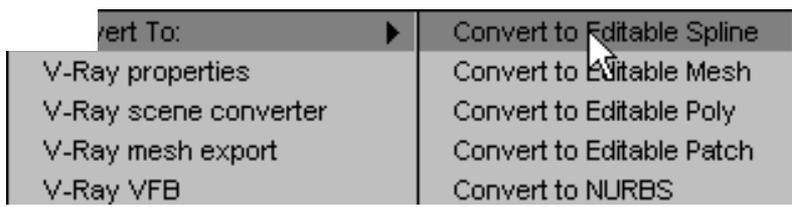
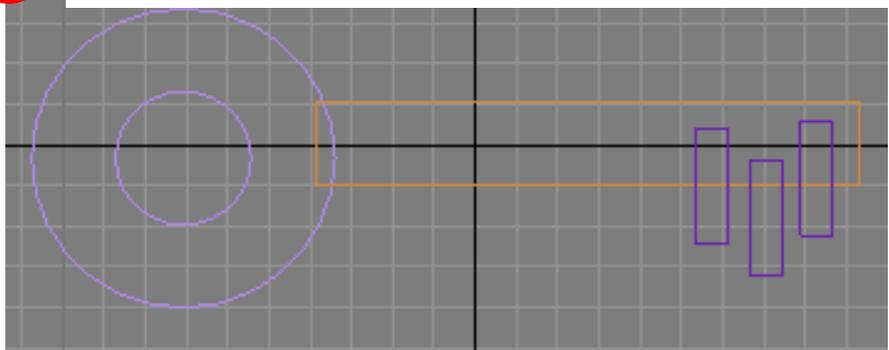
Attach: 하나의 오브젝트 만들기



Attach : 커맨드 패널의 'Create' 패널 > 'Splines'에서 그린 라인을 현재 라인에 추가하기 위해 사용합니다.

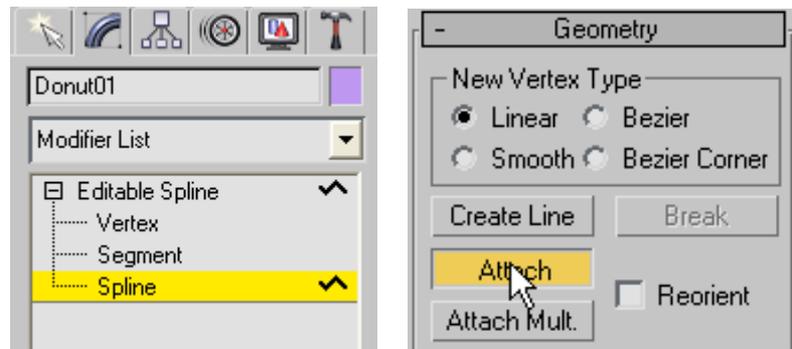
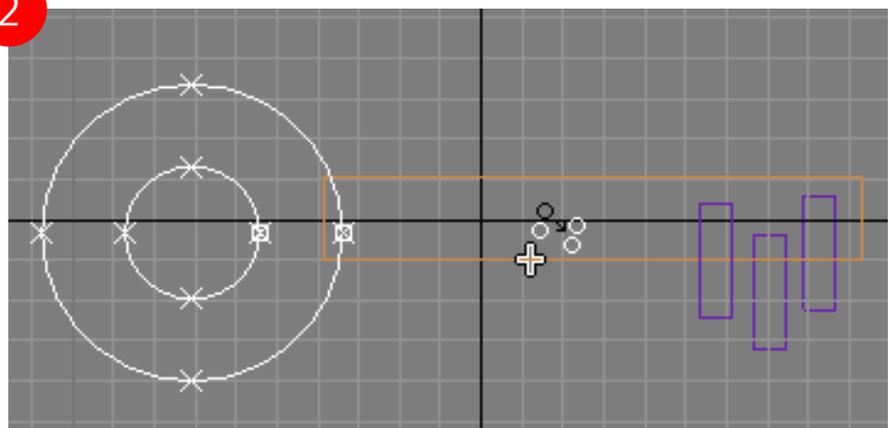
Attach Mult. : 이 명령은 하나로 합쳐야 할 오브젝트가 많을 때 사용합니다. 일일이 클릭하여 선택하기에는 개수가 많을 때 [Attach Multiple] 대화상자를 열어 연결할 수 있습니다. 'Find' 필드에 이름을 입력하거나 아래 나열된 오브젝트들을 선택하여 연결하면 됩니다.

1 spline : boolean



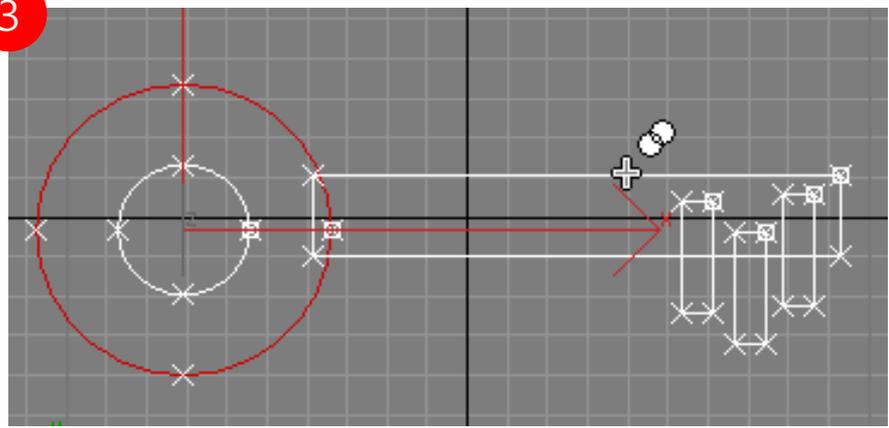
right click select the Editable Spline

2



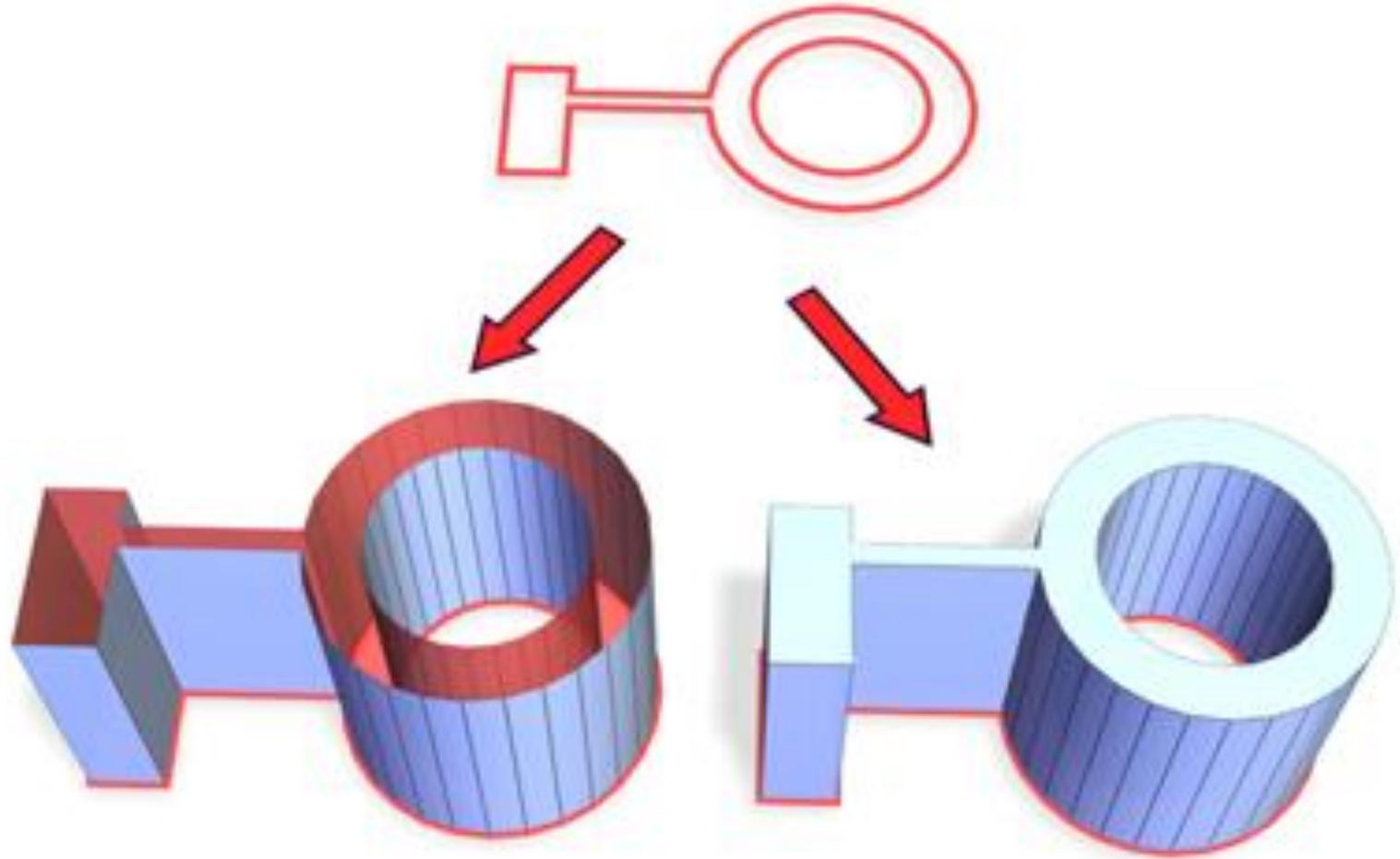
Attach button in the Editable Spline parameter

3



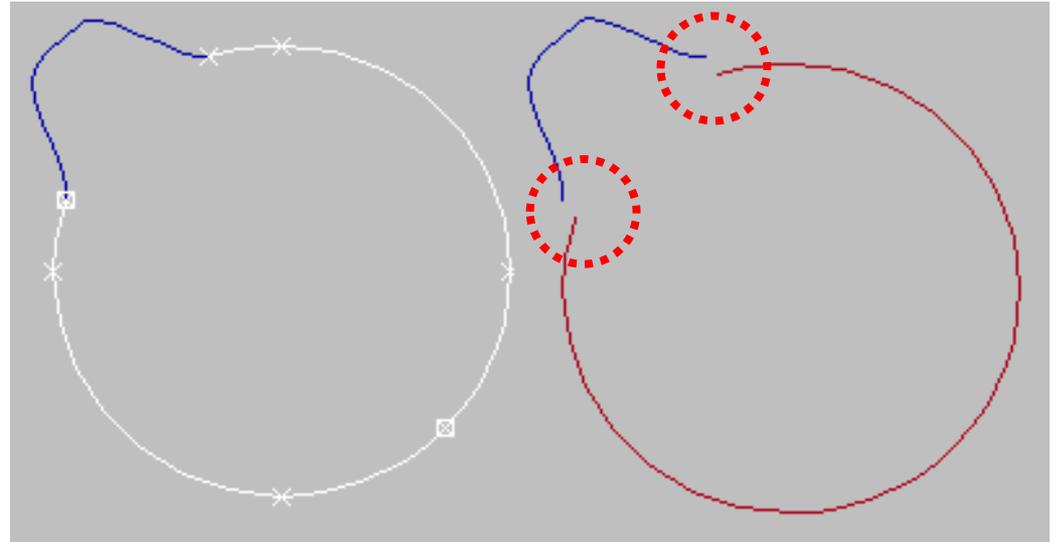
click on the boolean

열린 shape 인지 닫힌 shape 체크



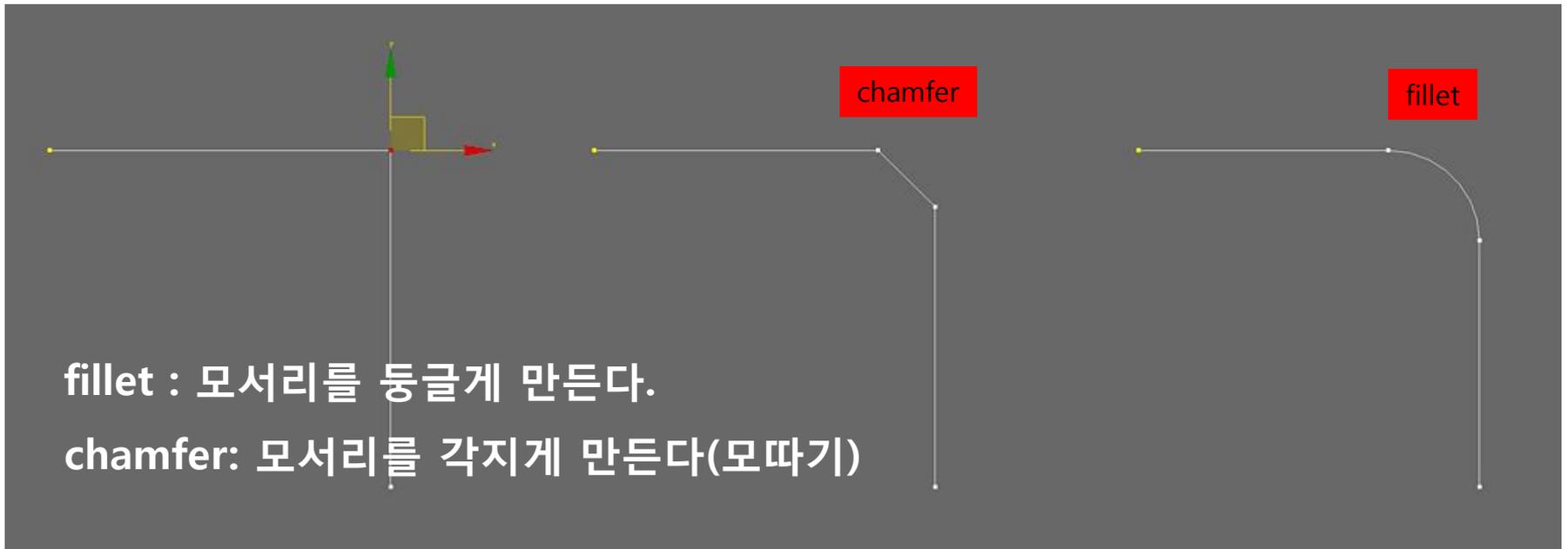
weld : 떨어진 두 정점을 붙여준다

spline Vertex 결합; weld



weld : 떨어진 두 정점을 붙여준다.

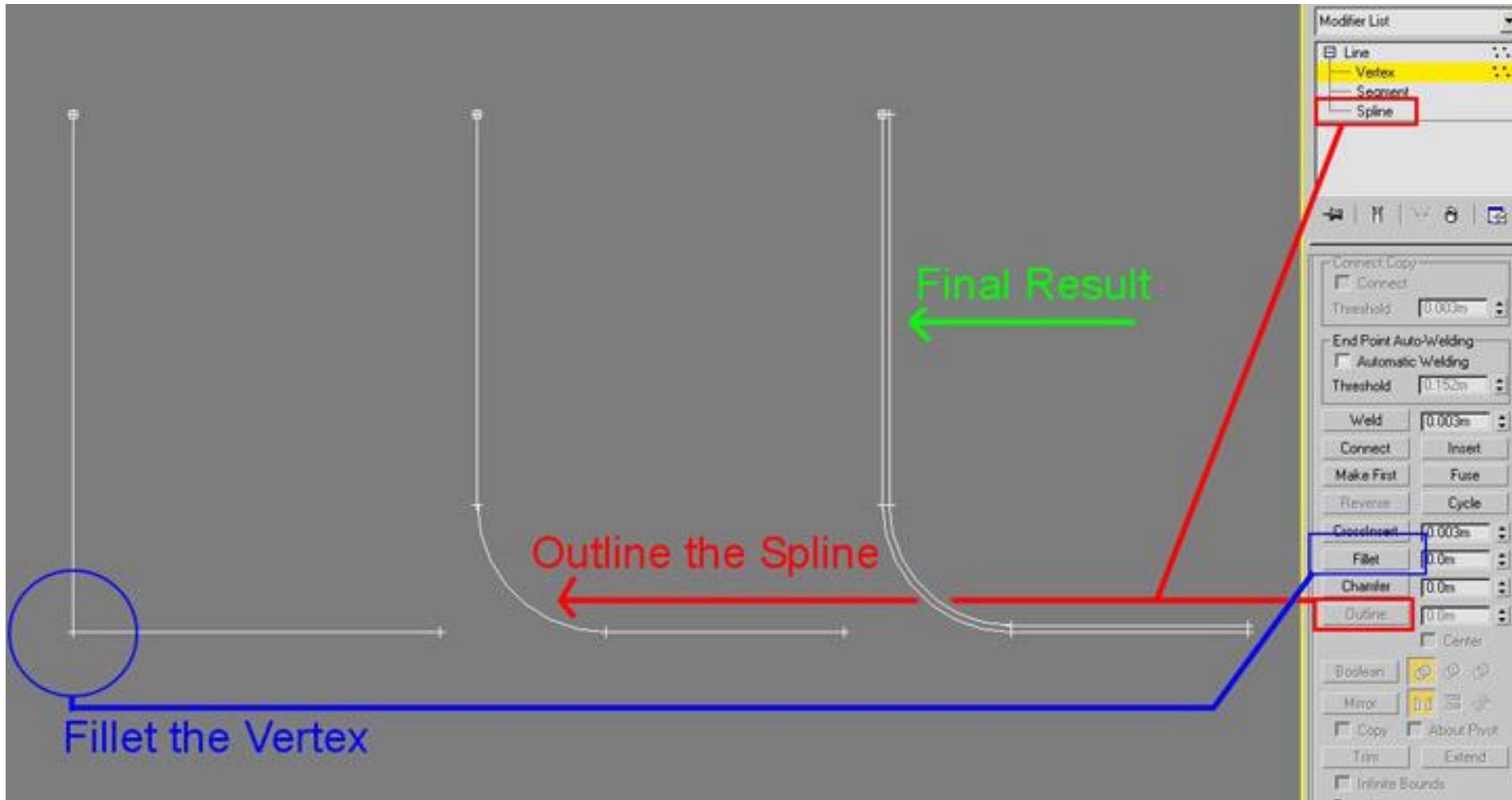
Connect: 떨어진 두 정점을 연결한다.



fillet : 모서리를 둥글게 만든다.

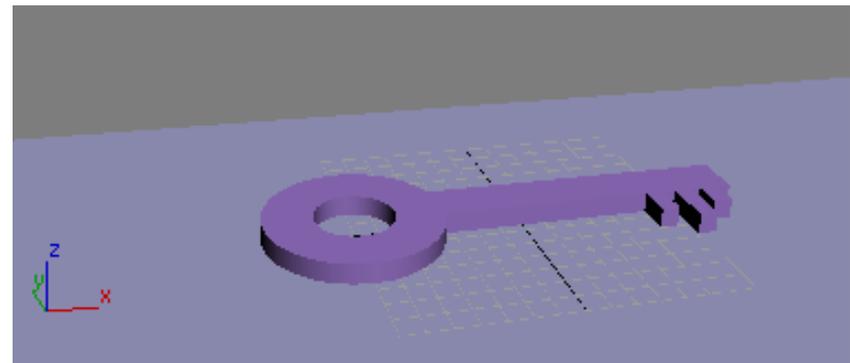
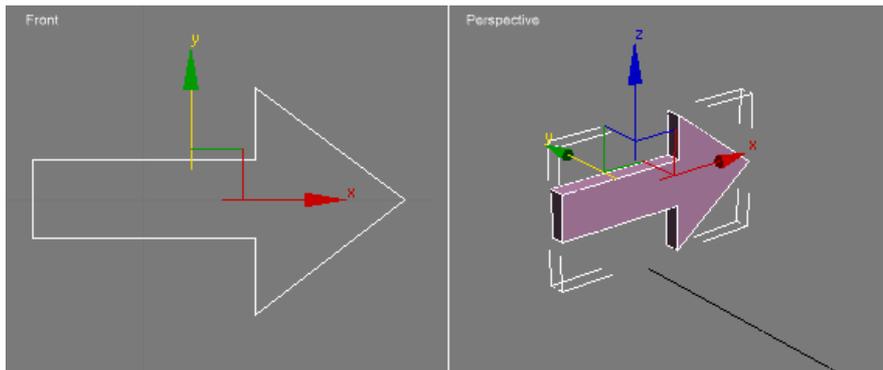
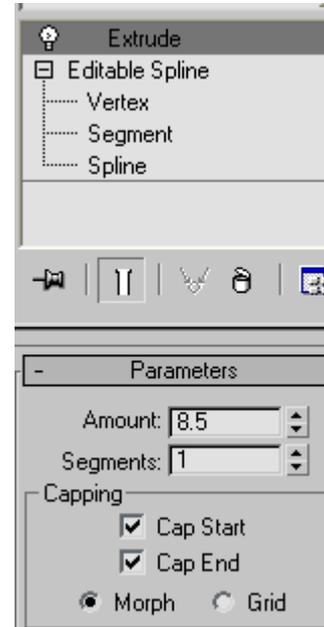
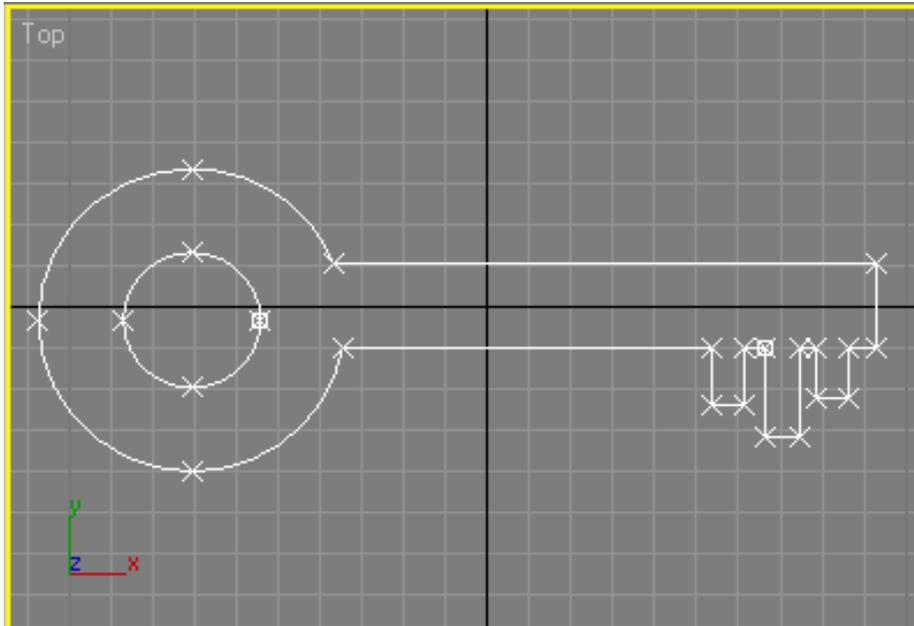
chamfer: 모서리를 각지게 만든다(모따기)

Spline: outline



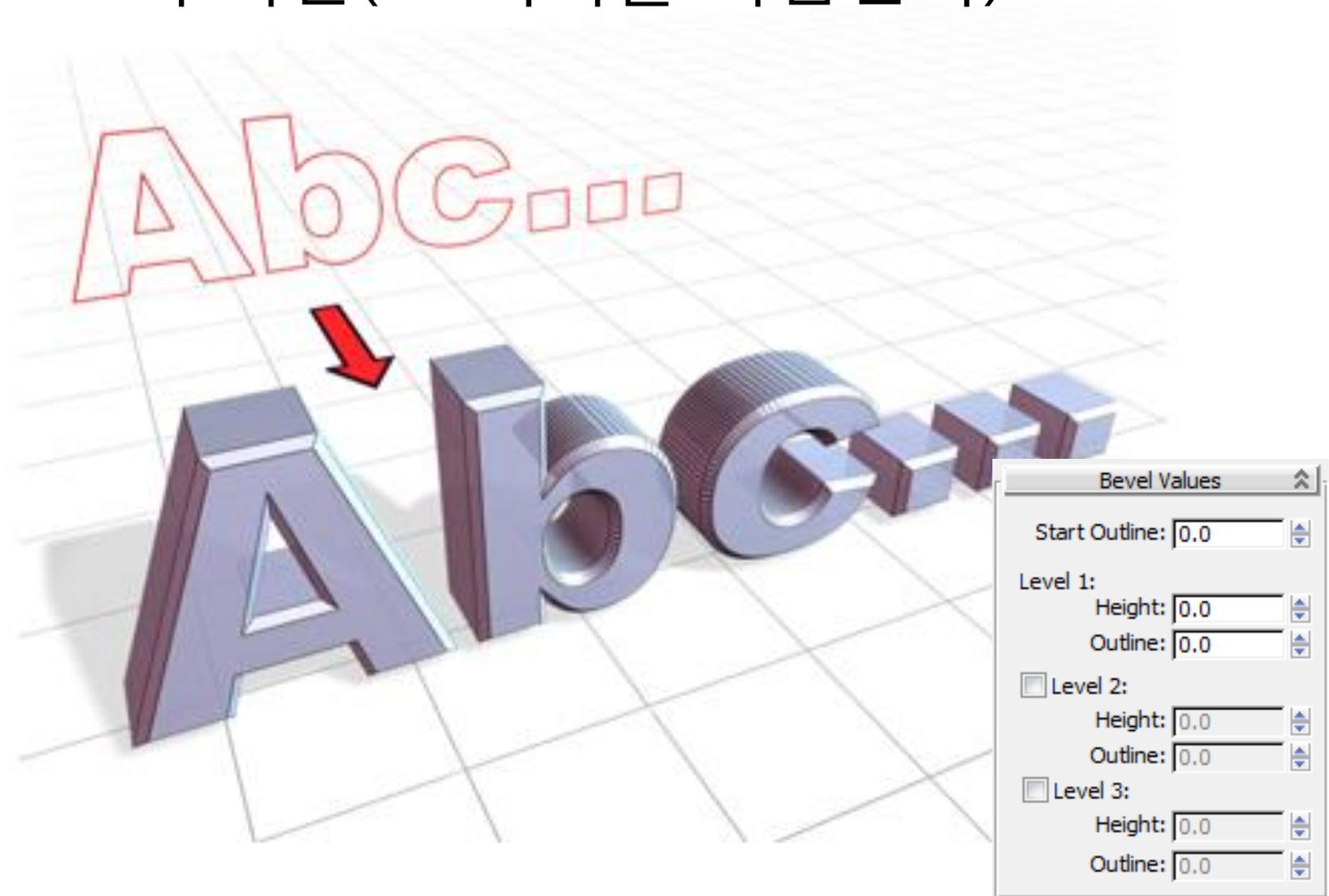
Extrude (돌출 수정자)

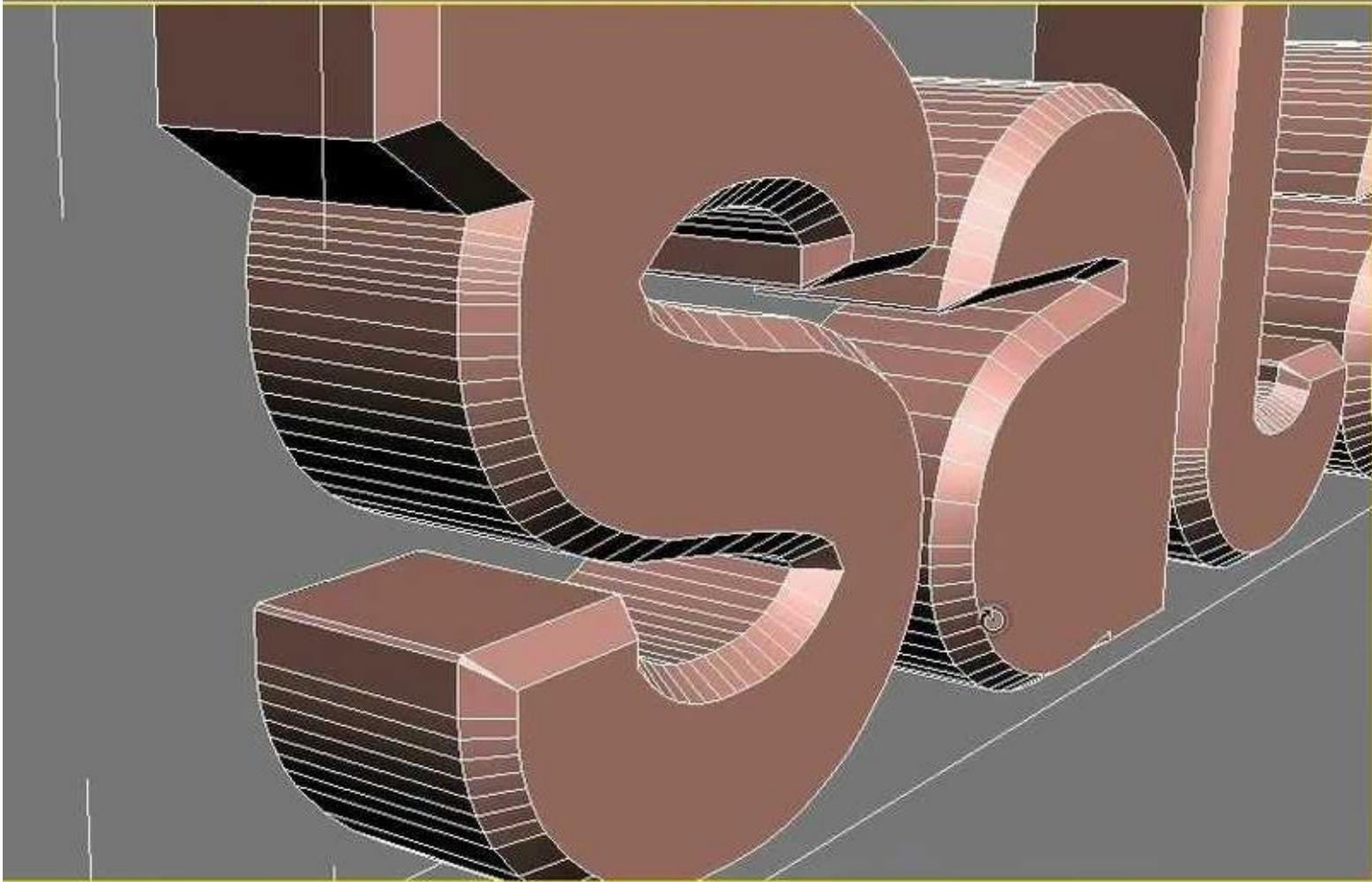
2D shape를 두께감 주기



Bevel

Extrude의 사촌(모서리를 다듬는다)





Text01

Modifier List

- Bevel
- Text

Intersections:

Keep Lines From Crossing

Separation: 1.0

Bevel Values

Start Outline: 0.0

Level 1:

Height: 16.5

Outline: 0.0

Level 2:

Height: 2.75

Outline: -2.05

Level 3:

Height: 0.0

Outline: 0.0



Auto Key Selected

Set Key

Key Filters...

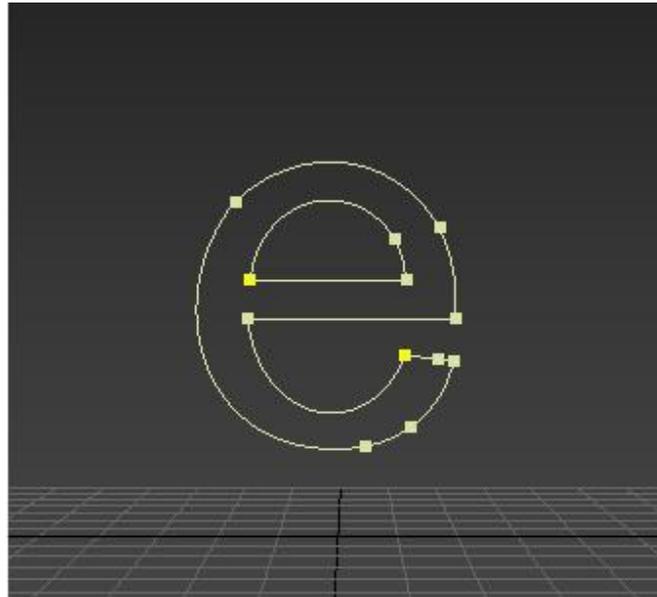
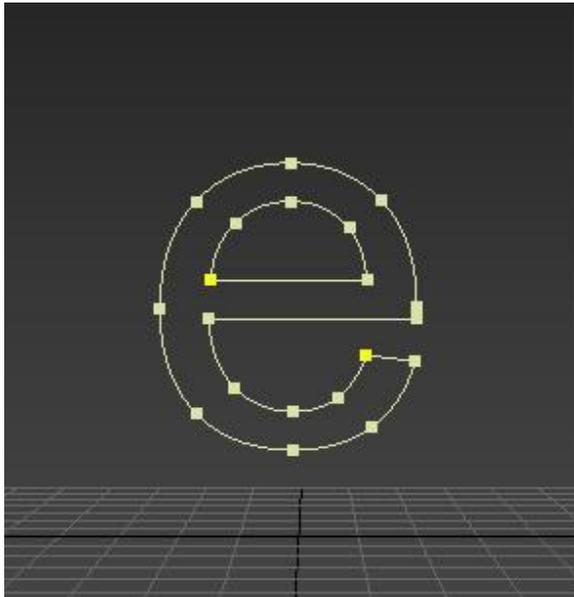
0

Ai(eps) 와 dingbat 폰트 활용



<http://www.vectorportal.com/free-vector/icon/>

<http://www.dafont.com/theme.php?cat=702>

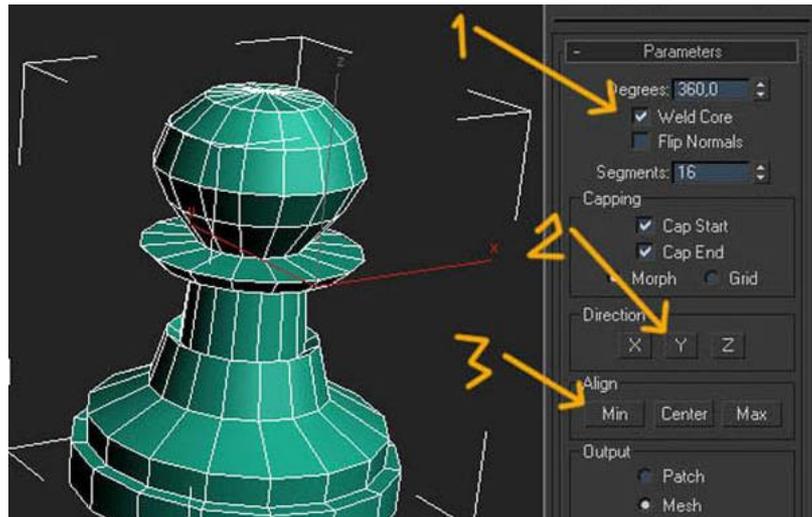
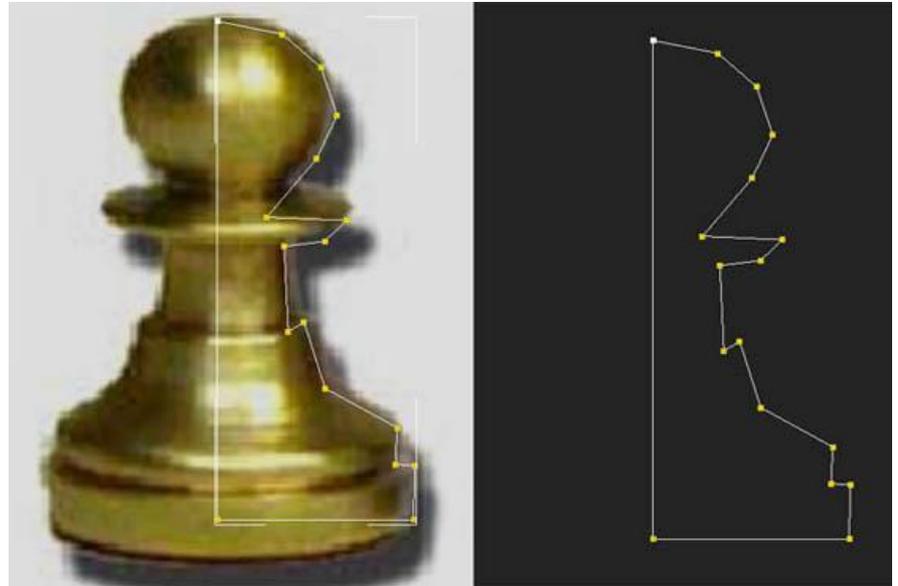
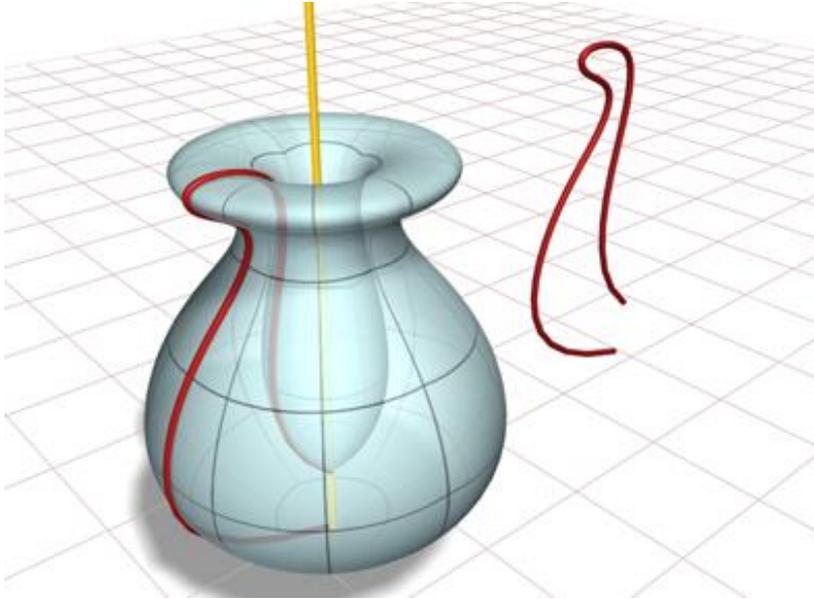


Optimize Spline Modifier

vertex 수를 감소
형태 최적화

lathe (회전 수정자)

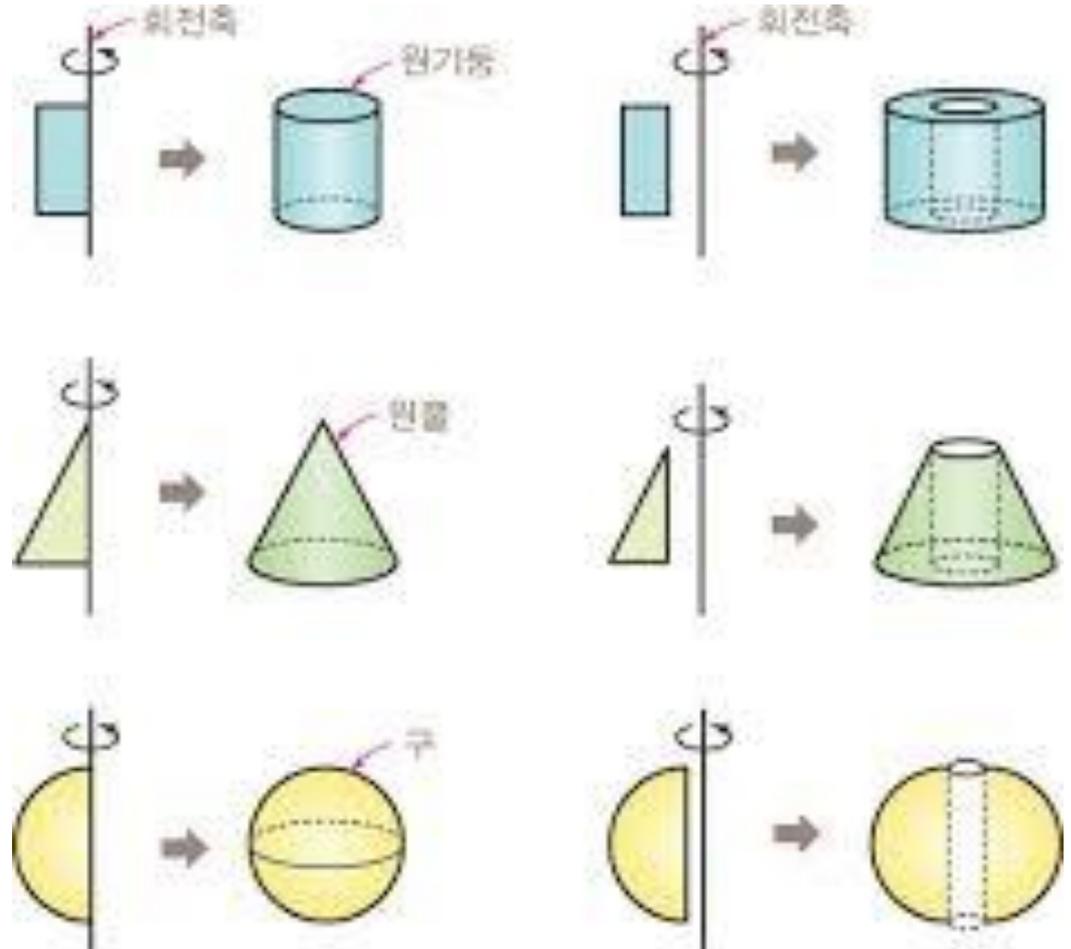
Spline으로 회전된 오브젝트의 기초로 사용



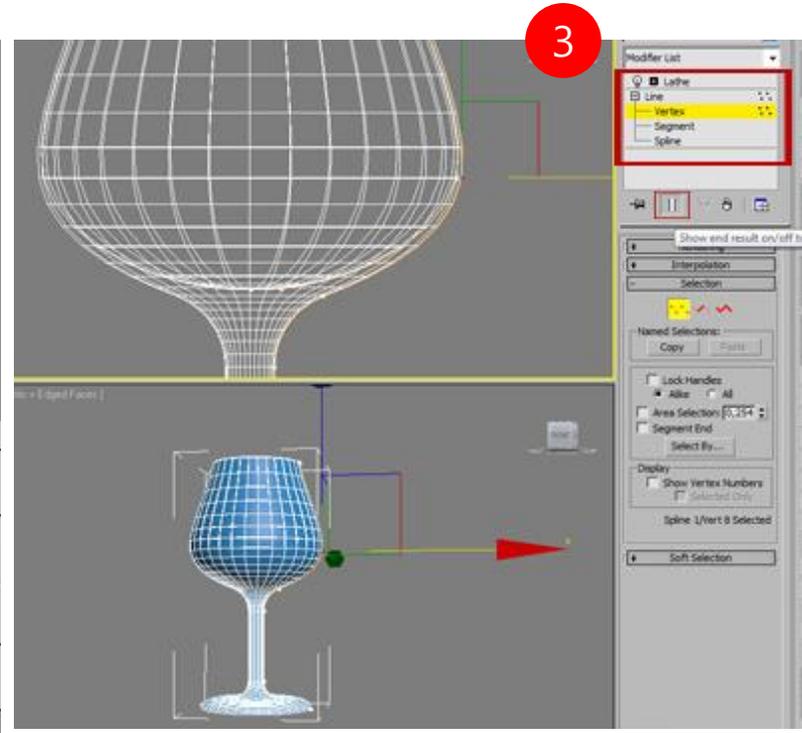
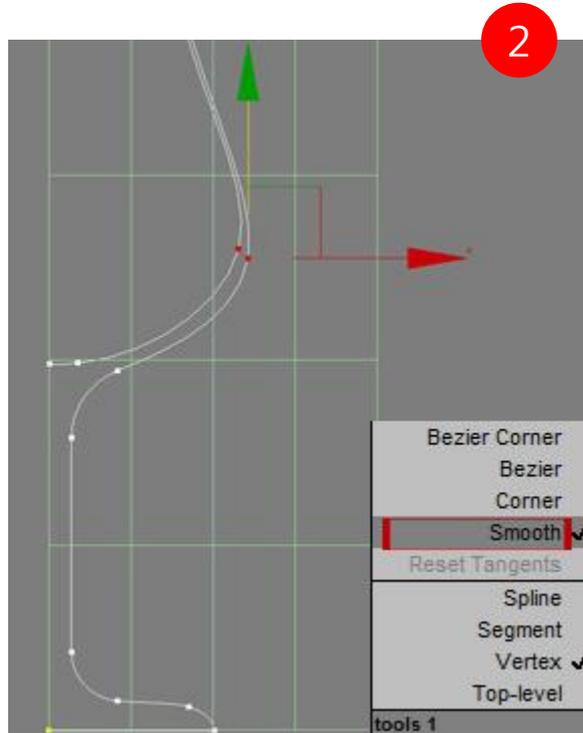
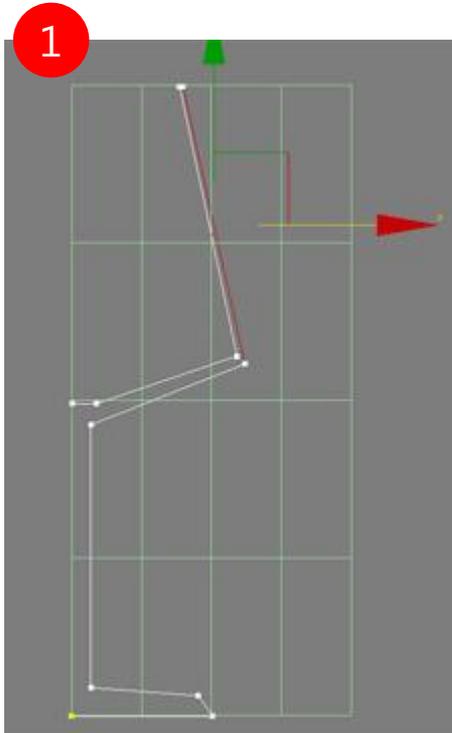
lathe (회전 수정자) - 회전축

● 평면도형이 회전축에서 떨어져 있는 경우

* 평면도형이 회전축에서 떨어져 있는 경우의 회전체는 회전축과 평면도형 사이의 공간이 하나의 회전체 모양이 되어 빈 공간을 가지게 된다.



Spline Modeling a Glass Tutorials



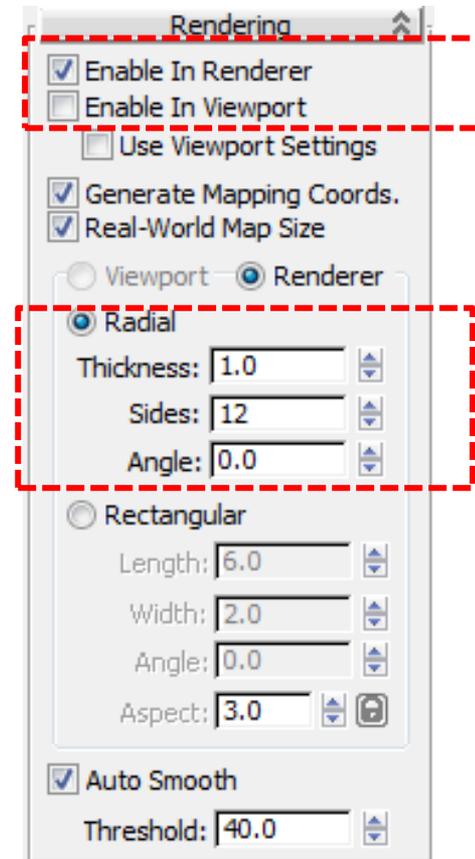
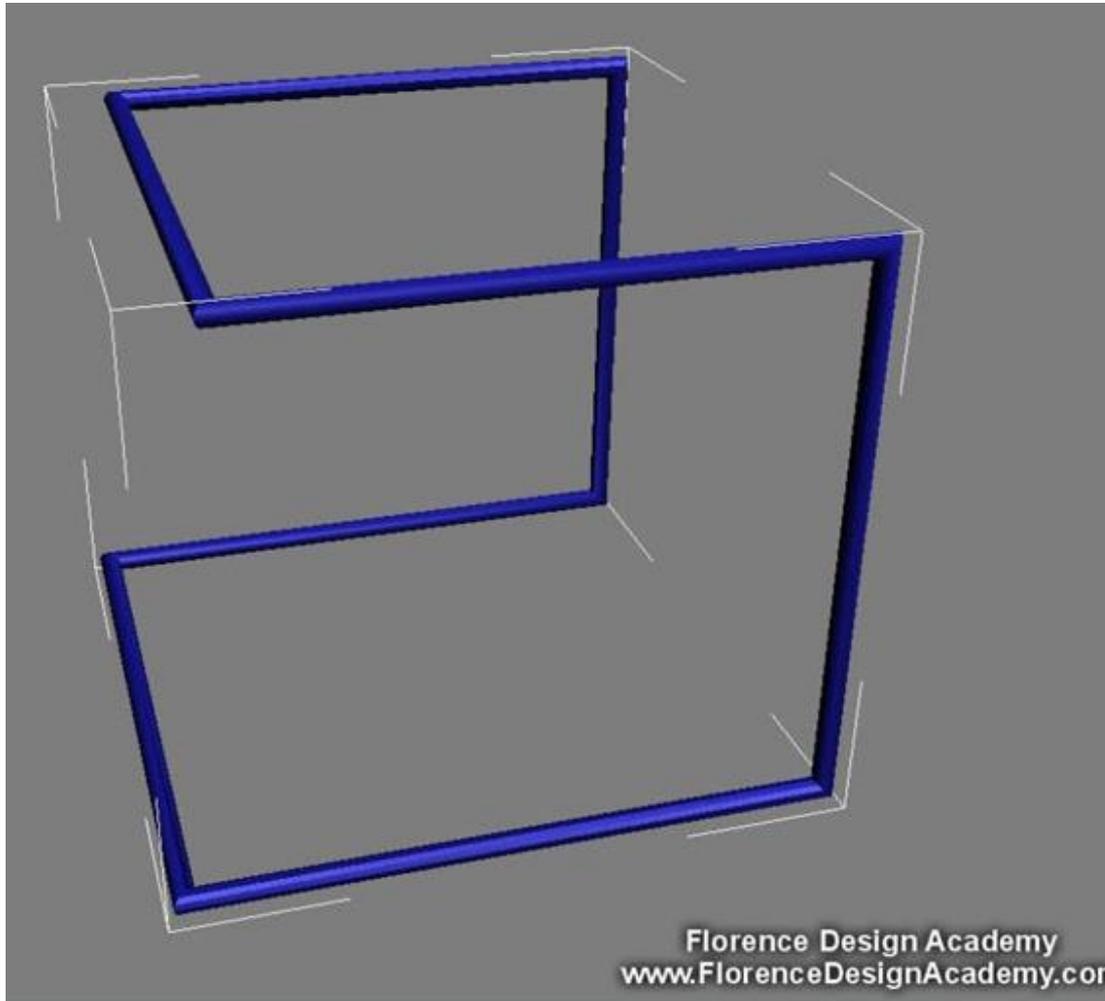
주름진 컵의 단면은 어떻게 표현 해야 하나?



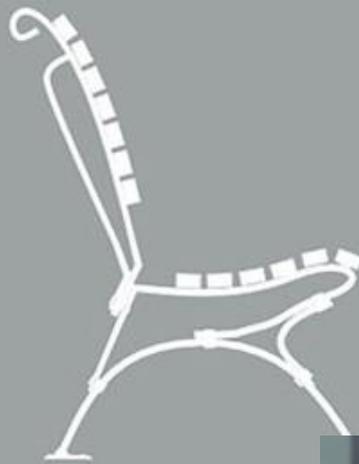
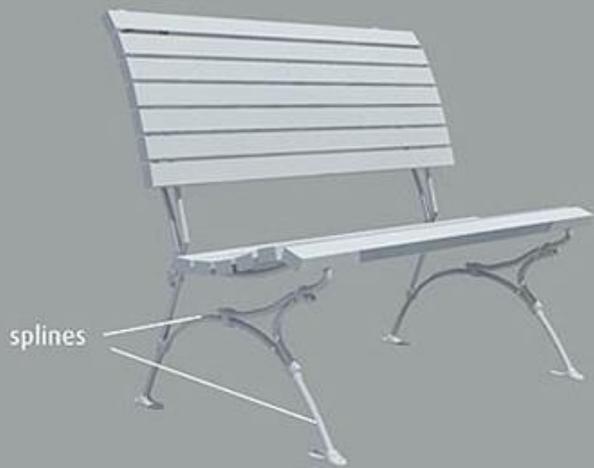
spline render

shape 및 spline 은 기본적으로 렌더링에서 보이지 않지만

Rendering 옵션에서 활성화시키면 굵기를 가진 오브젝트로 보이게 할 수 있다.

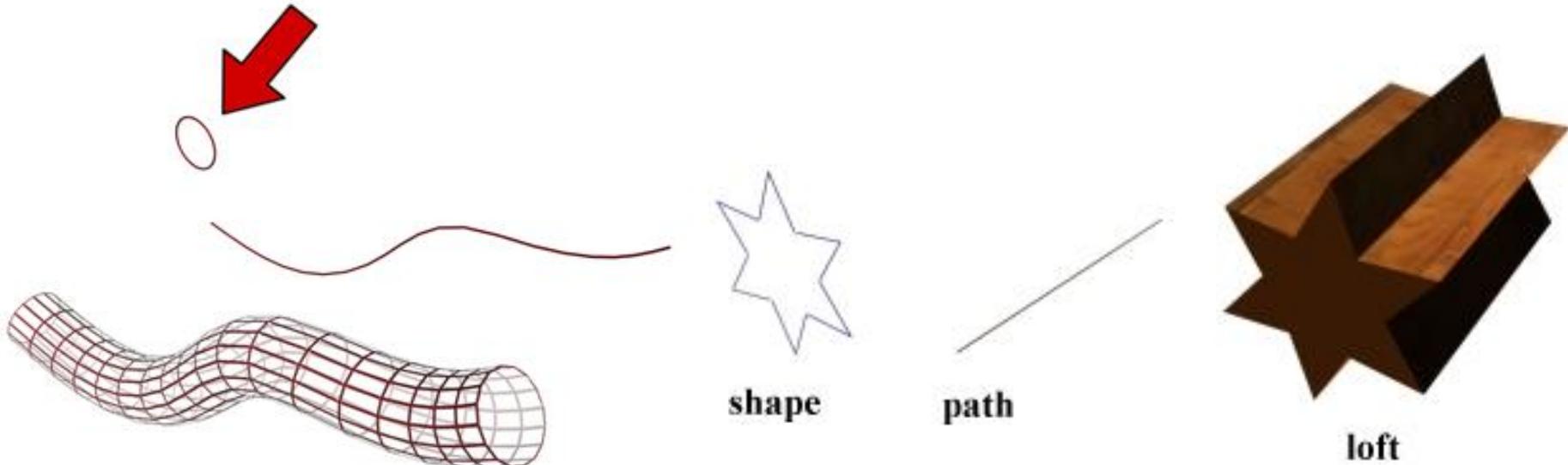


Garden Bench

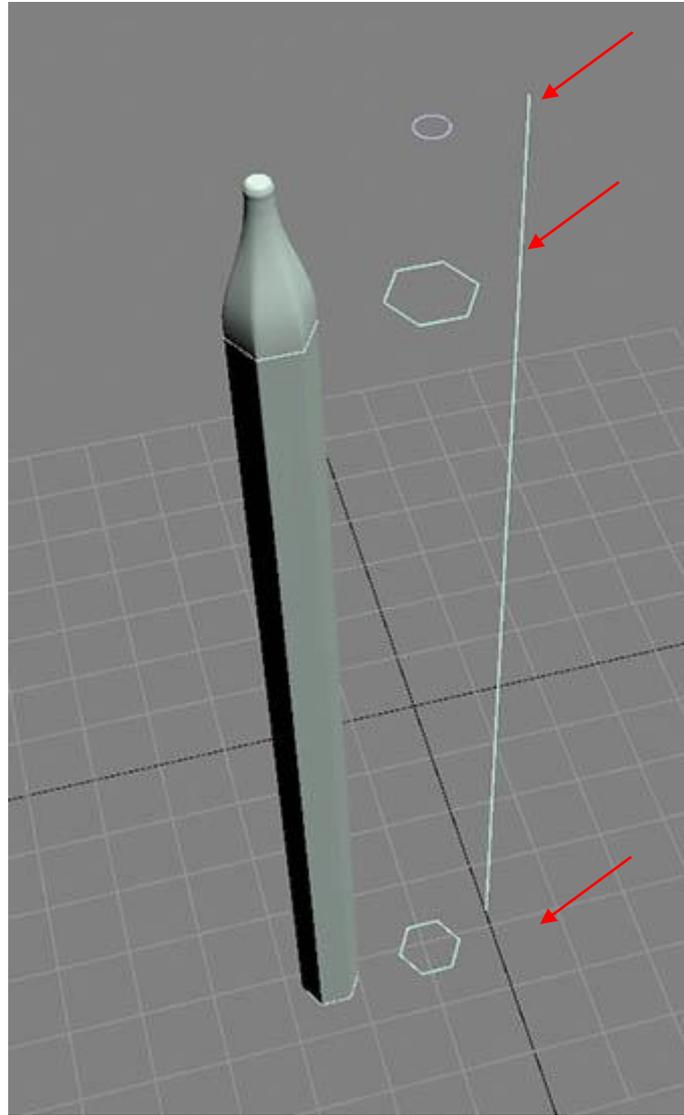
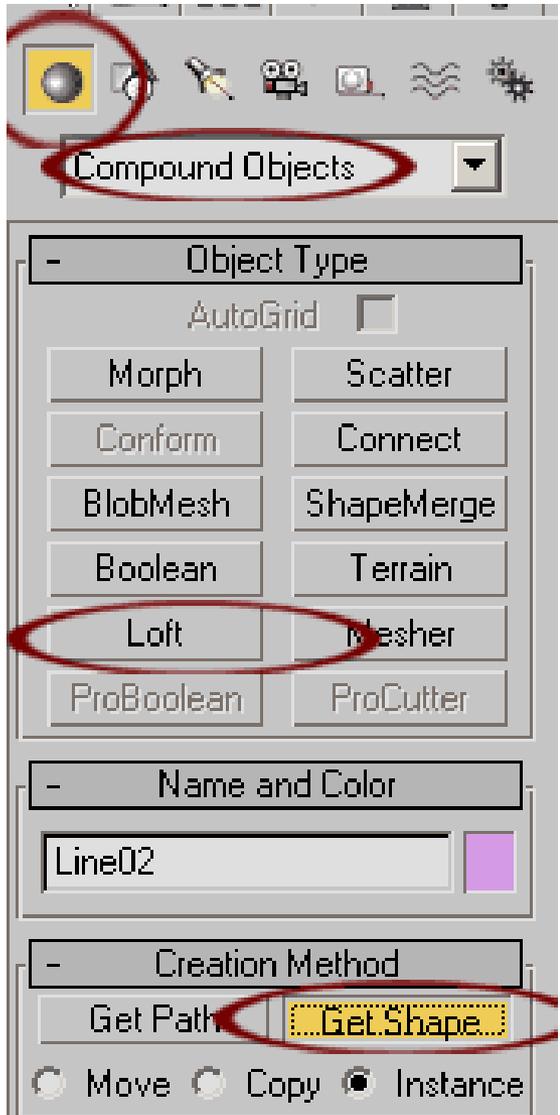


로프트(Loft)

하나의 모양을 경로로 결합하고 하나 이상의 모양을 해당 경로를 따라 횡단면으로 결합하여 로프트(Loft) 오브젝트를 구성하는 구성요소로 사용



로프트 (Loft)



- 1.Path 선택후
- 2.Loft 지정하기
- 3.Get shape 선택



