Nile Visualization

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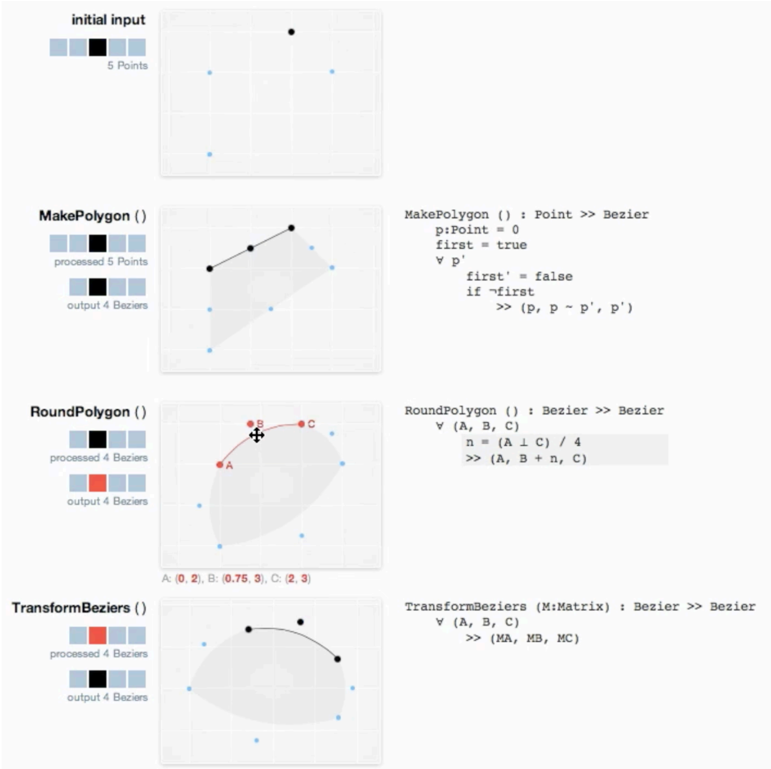
An interactive visualization of the Gezira/Nile software by Dan Amelang, a graphics renderer (Gezira) written in a domain specific language (Nile).

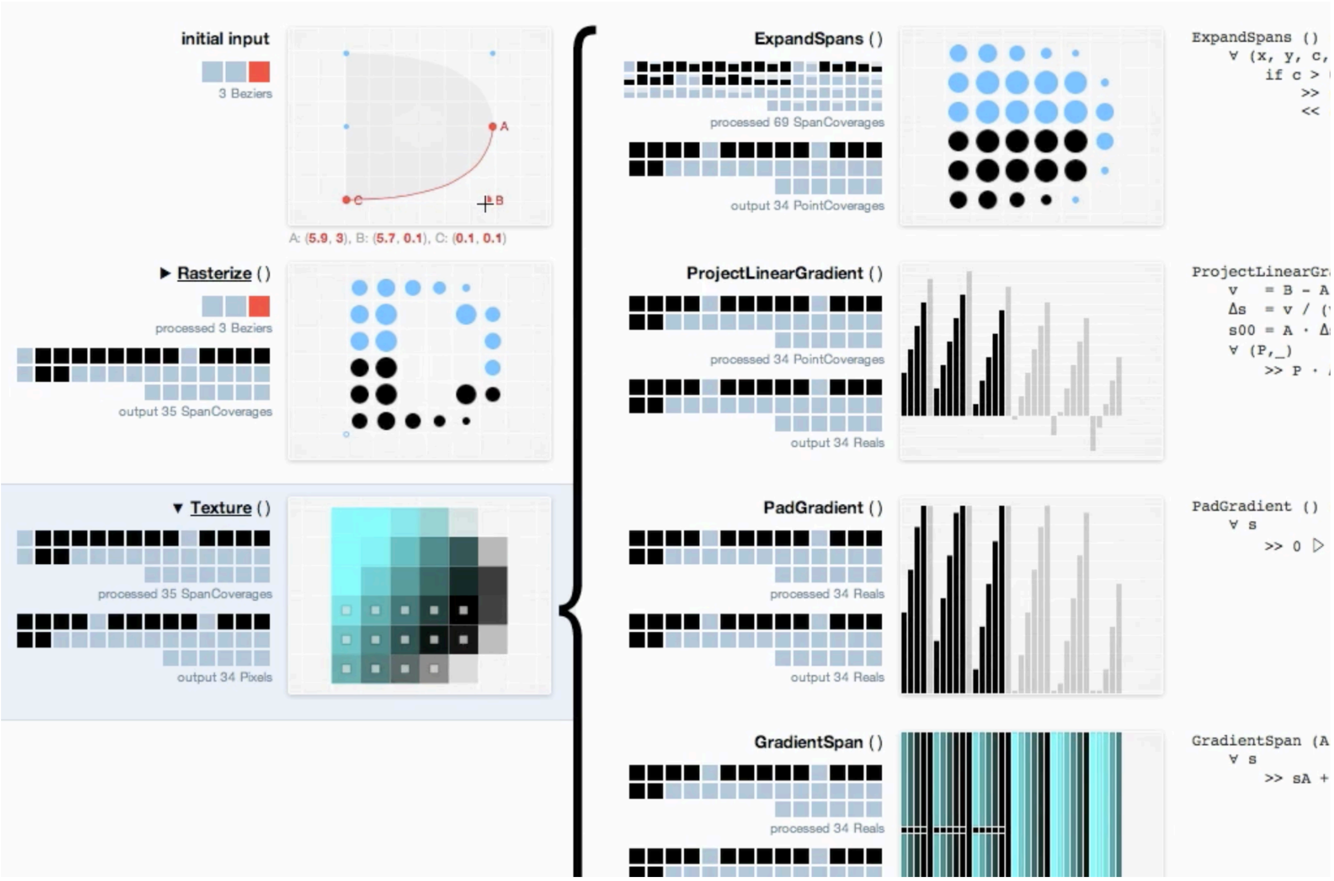
This project points to ways in which software description, data, and behavior, and be represented and made tangible as deeply and vivaciously interlinked representations.



```
MakePolygon () : Point >> Bezier
    p:Point = 0
    first = true
    ∀ p'
        first' = false
        if ¬first
            >> (p, p ~ p', p')
```

```
RoundPolygon () : Bezier >> Bezier
    ∀ (A, B, C)
        n = (A ⊥ C) / 4
        >> (A, B + n, C)
```

```
TransformBeziers (M:Matrix) : Bezier >> Bezier
    ∀ (A, B, C)
        >> (MA, MB, MC)
```



```
ExpandSpans ()
    ∀ (x, y, c,
        if c >
            >>
            <<
```

```
ProjectLinearGr
    v   = B - A
    Δs  = v / (
    s00 = A · Δ
    ∀ (P,_)
        >> P ·
```

```
PadGradient ()
    ∀ s
        >> 0 ▷
```

```
GradientSpan (A
    ∀ s
        >> sA +
```