

September 25th - 28th, 2017

INTERFACES

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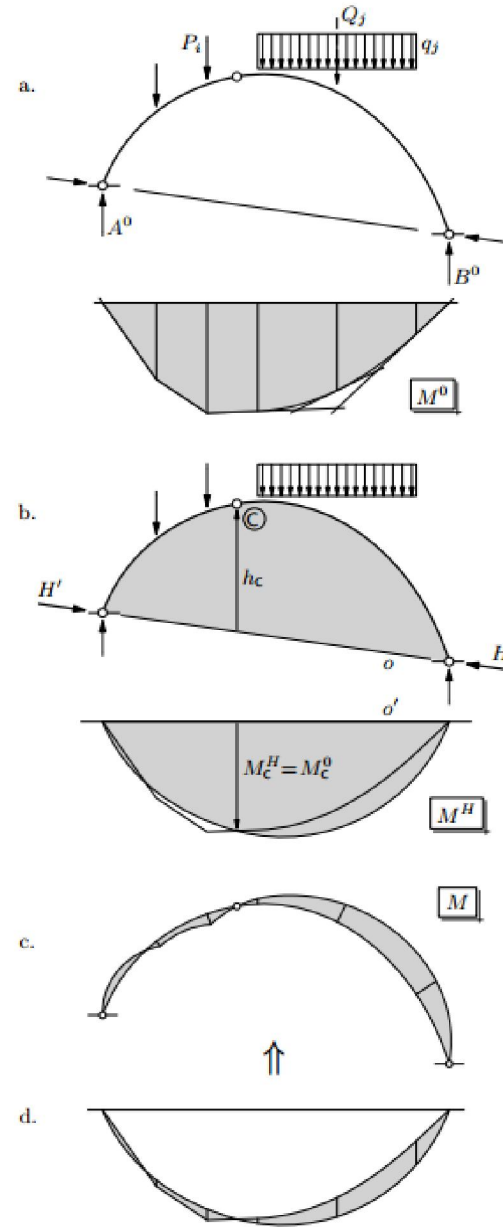
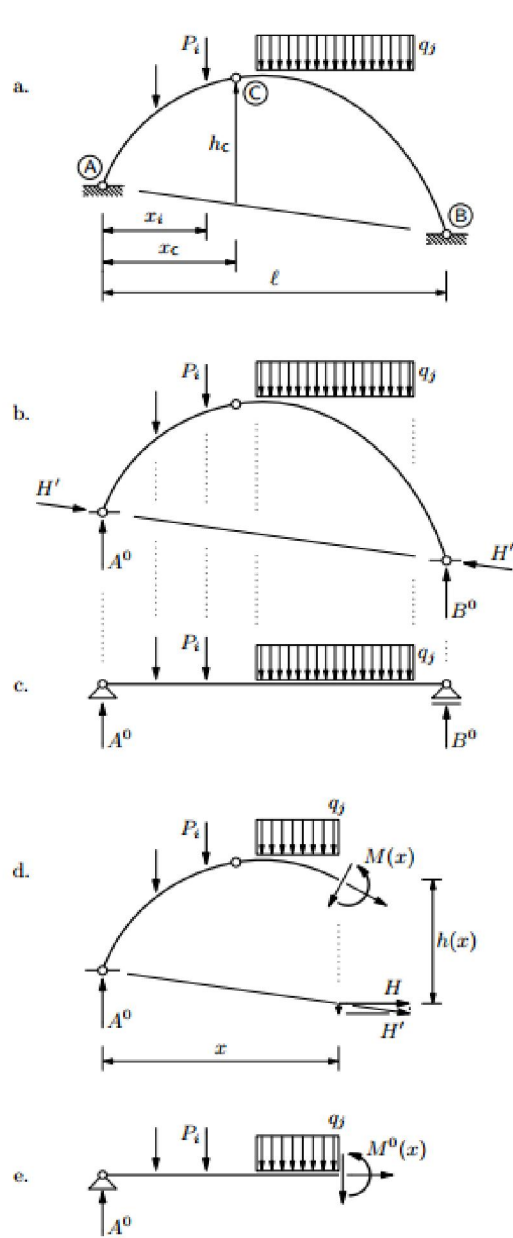
9754

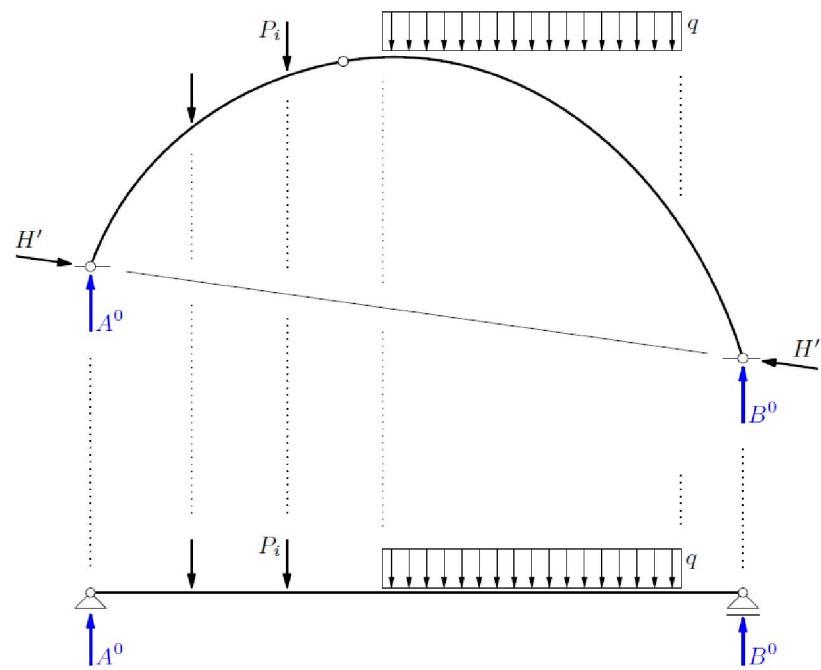
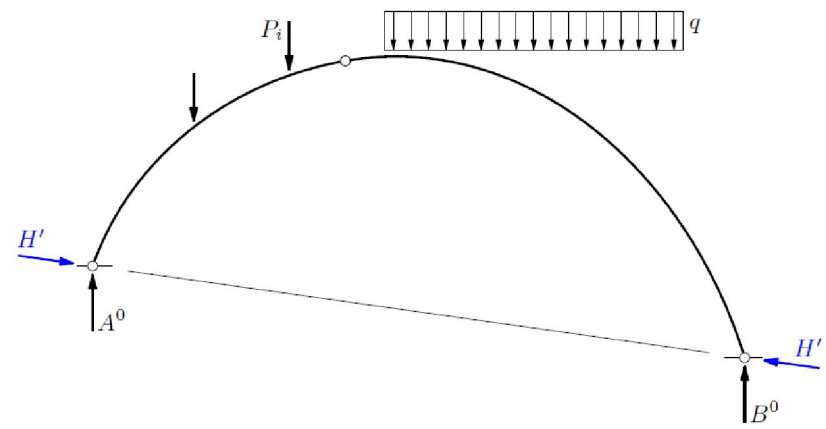
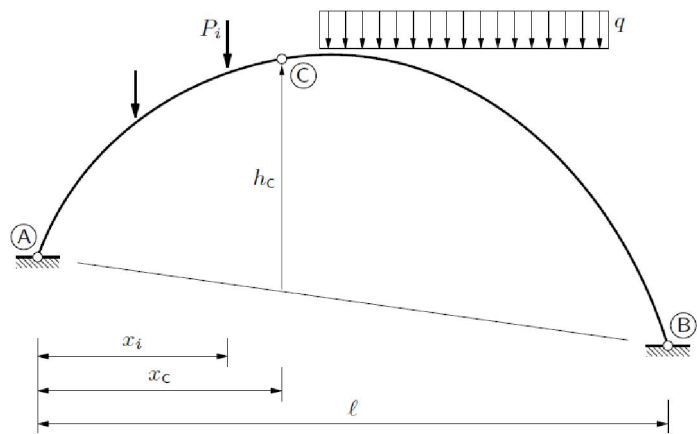
Affine transformations of three-hinged arches: reviving an old method

Elizabeta Šamec

Maja Baniček, Krešimir Fresl, Elizabeta Šamec, Heinrich Werner
Faculty of Civil Engineering, University of Zagreb, Croatia

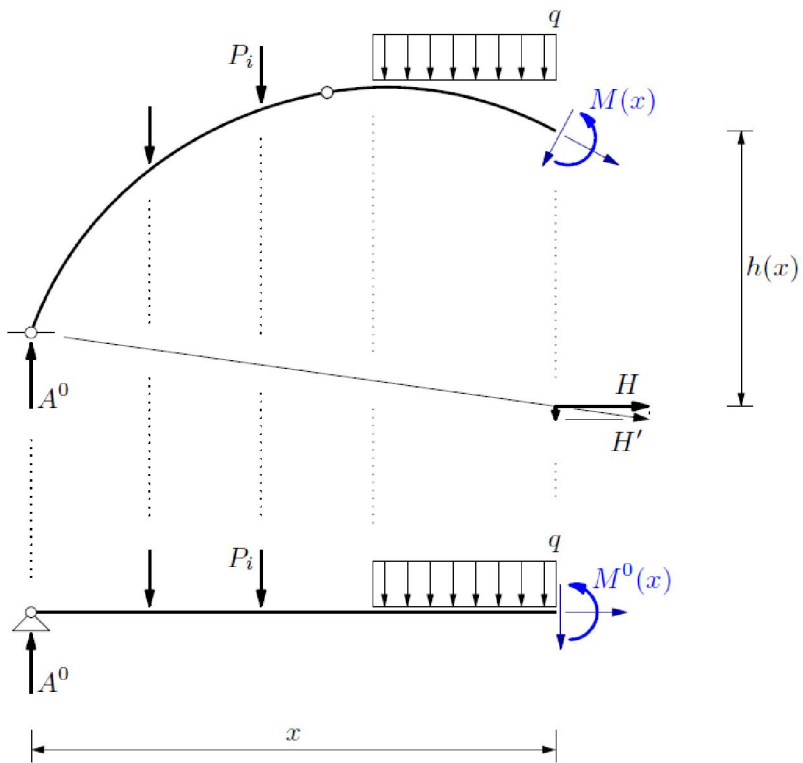






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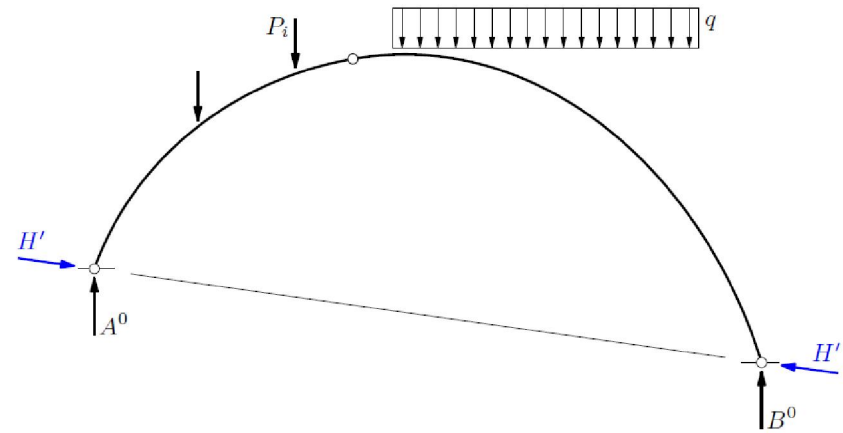
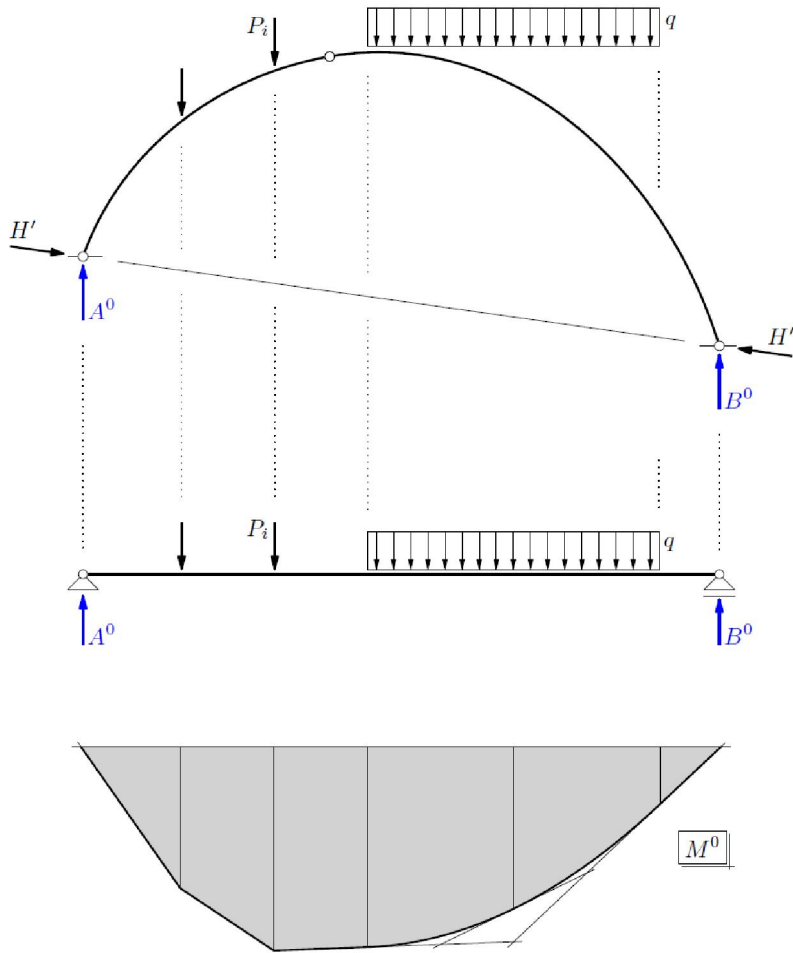


$$M(x) = \underbrace{x \cdot A^0 - \sum_{i \in \widehat{A}x} (x - x_i) \cdot P_i - (x - x_{Q(x)}) \cdot Q(x)}_{M^0(x)} - h(x) \cdot H$$

$$M(x) = M^0(x) - h(x) \cdot H$$

$$M(x) = M^0(x) - M^H(x)$$





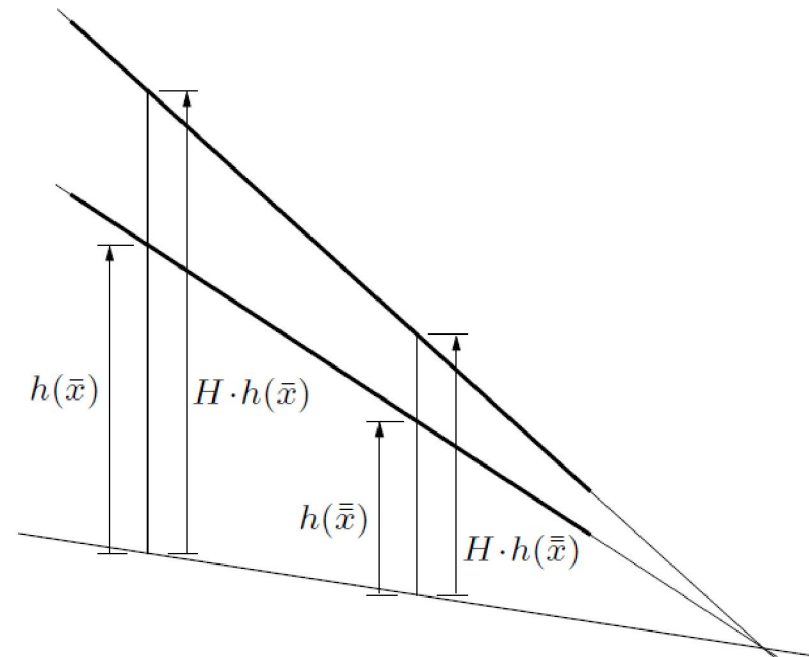
$$M^H(x) = H \cdot h(x)$$

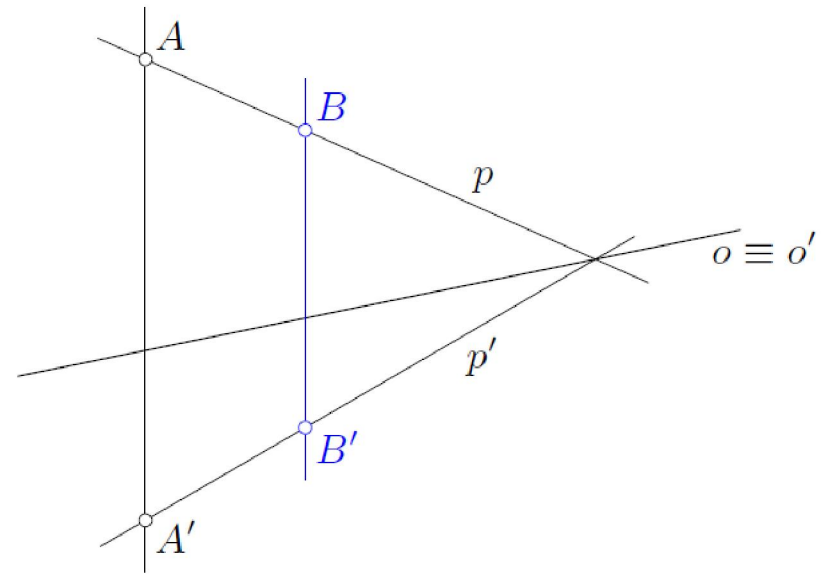
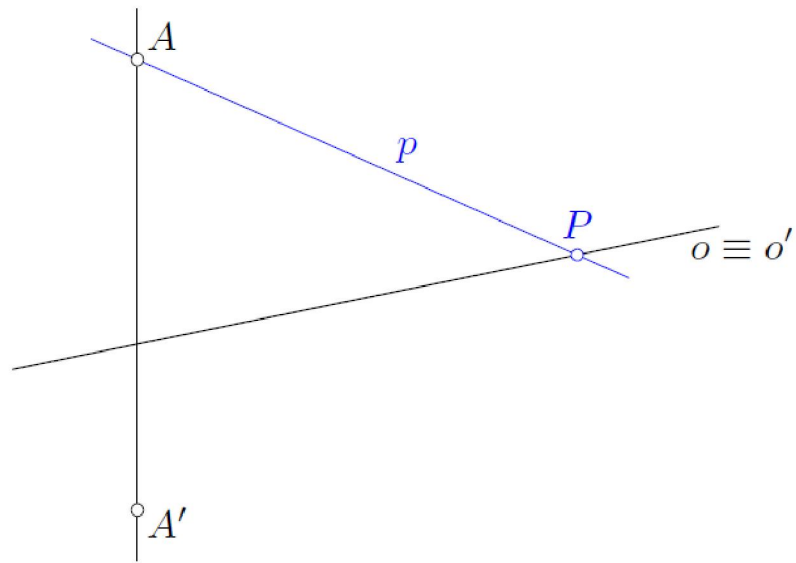
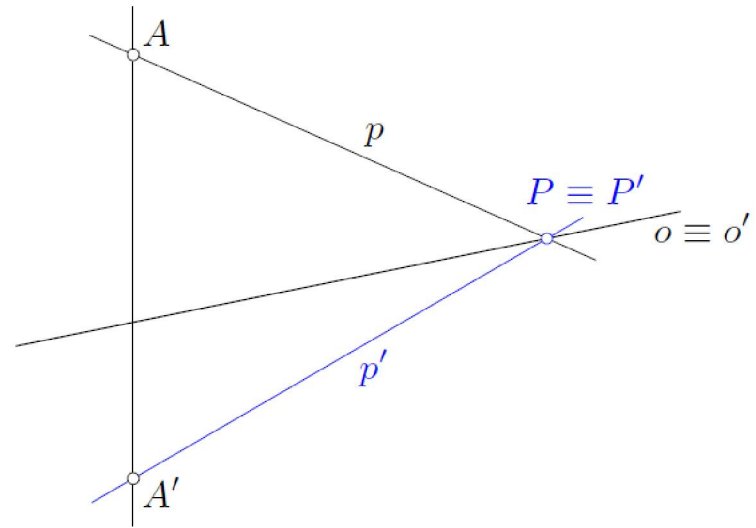
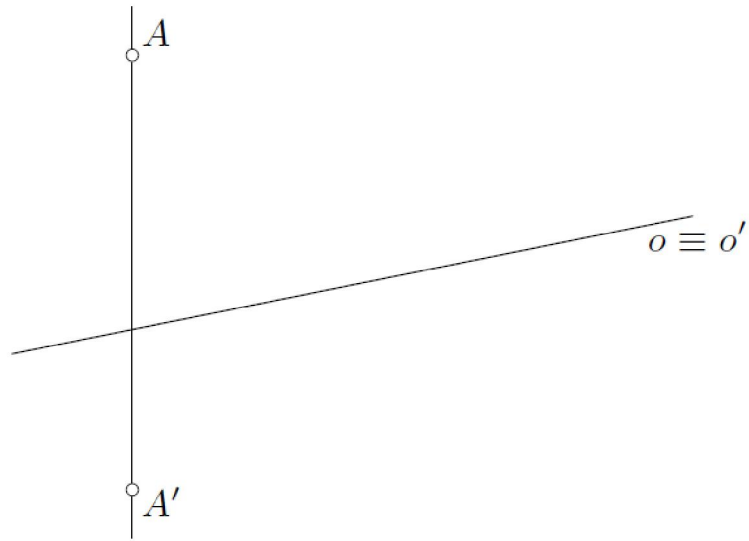


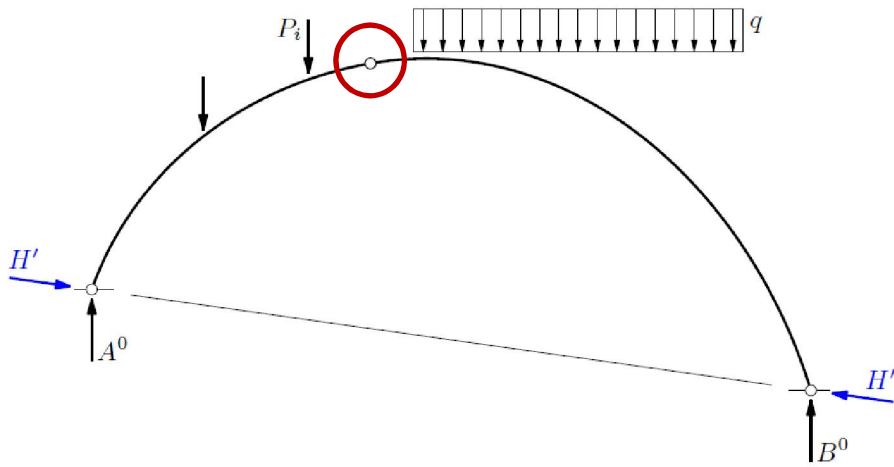
$$M^H(x) = H \cdot h(x)$$

$$(x, h(x)) \mapsto (x, h(x) \cdot H)$$

$$(x, h(x)) \mapsto (x, M^H(x))$$



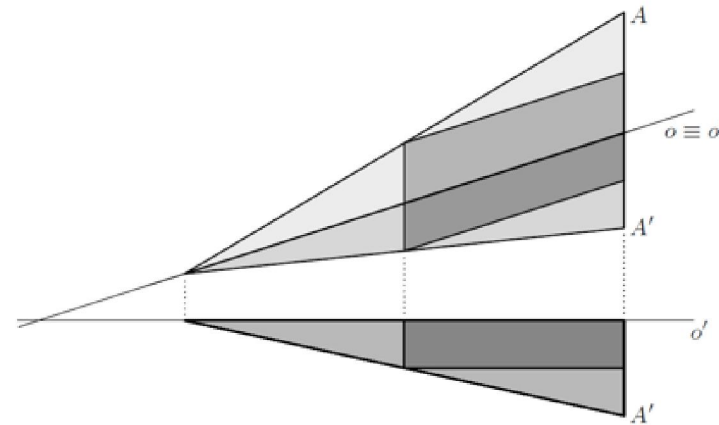
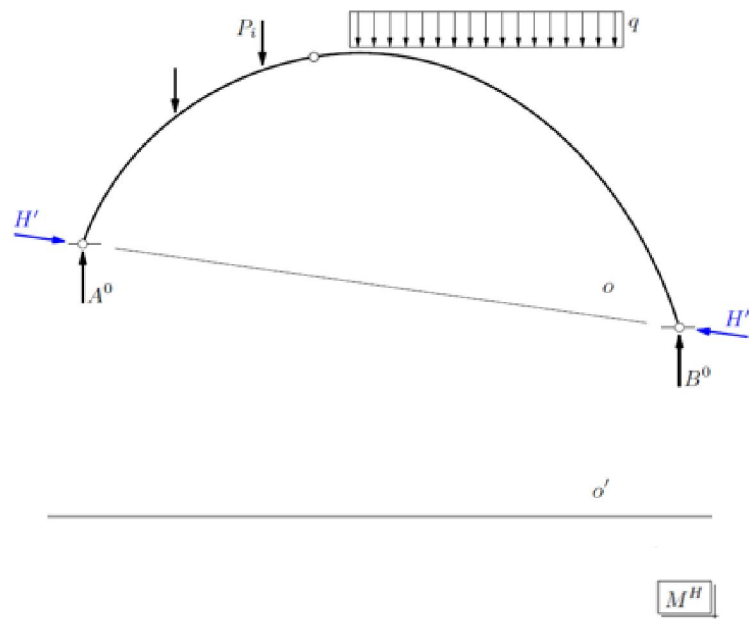




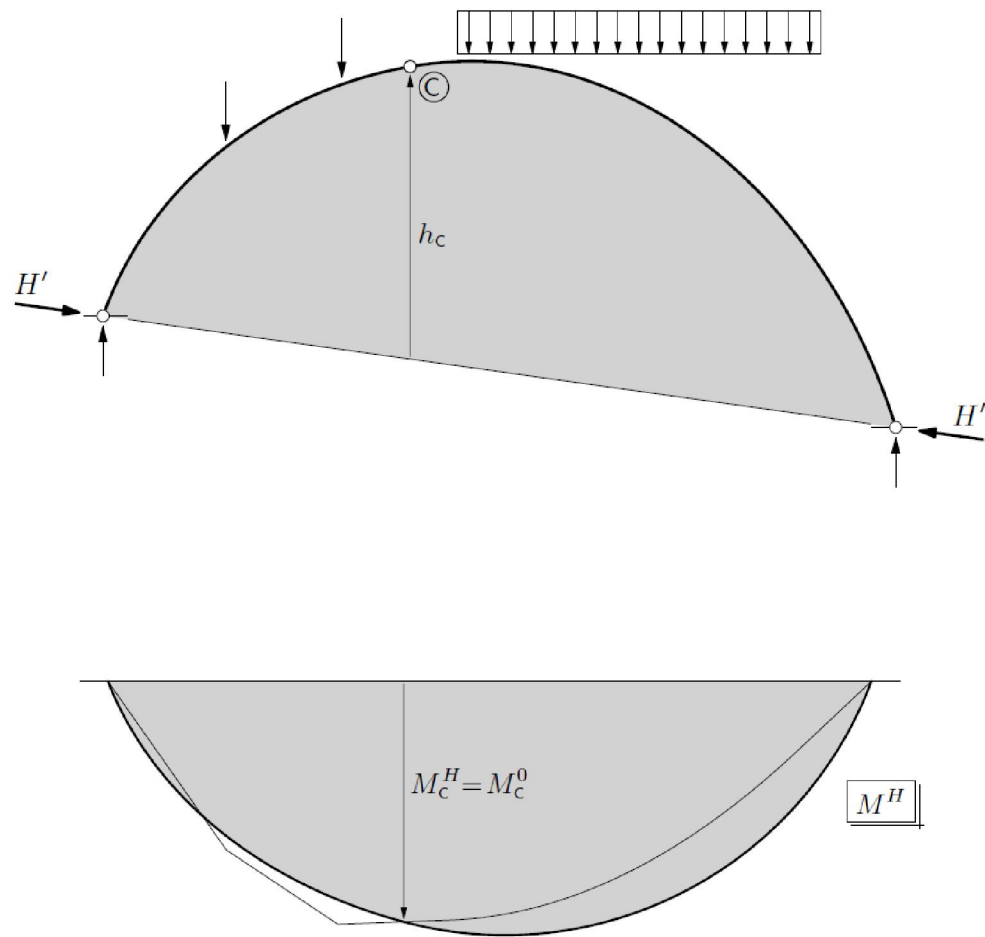
$$(x_C, h(x_C)) \mapsto (x_C, M_C^H)$$

$$M_C^H = M_C^0$$

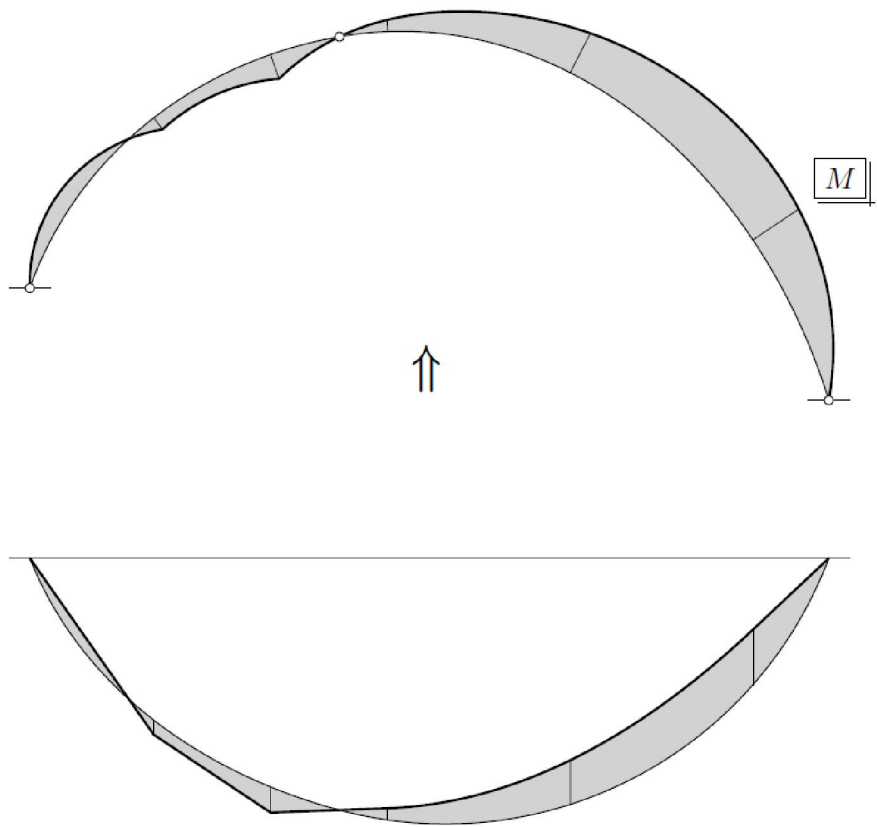




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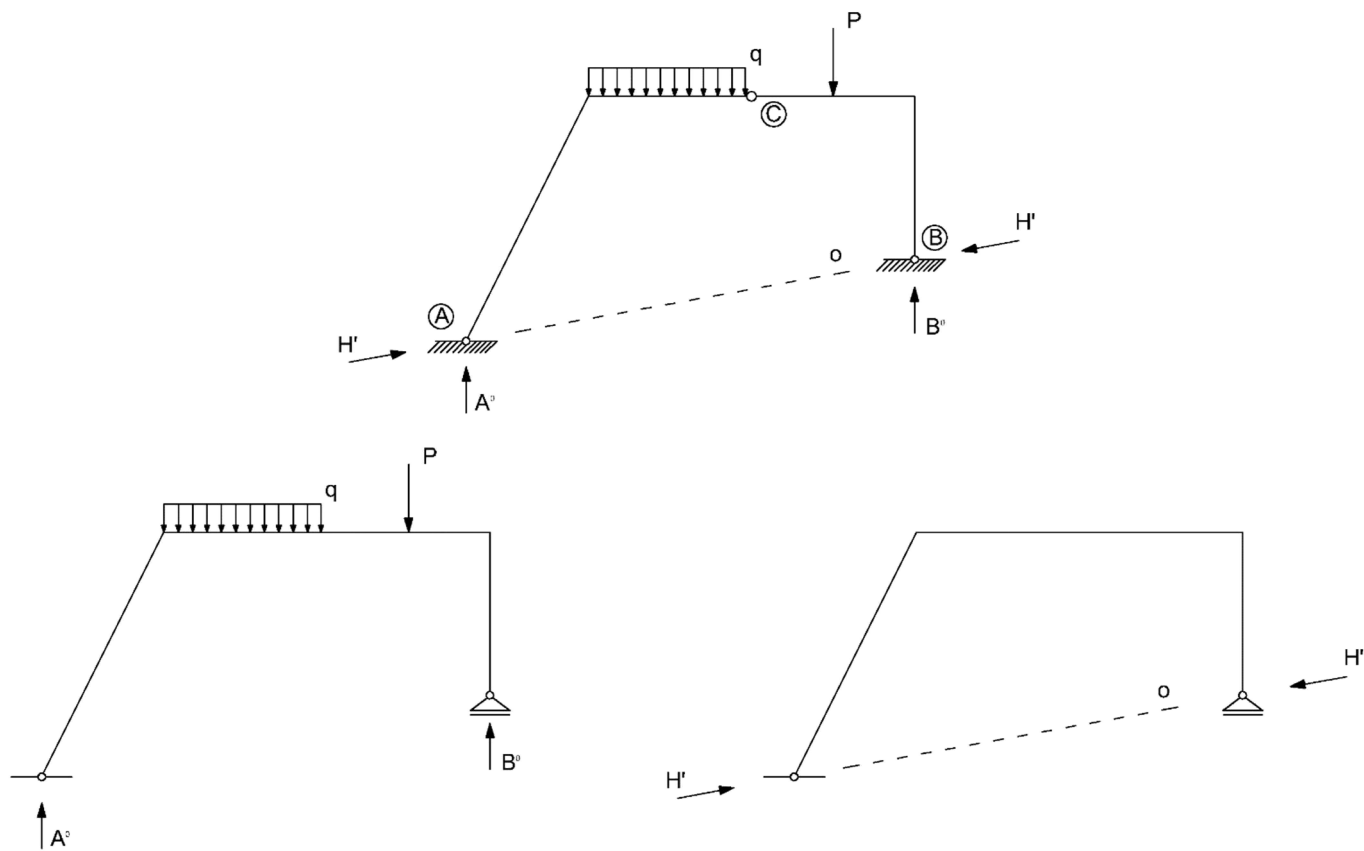
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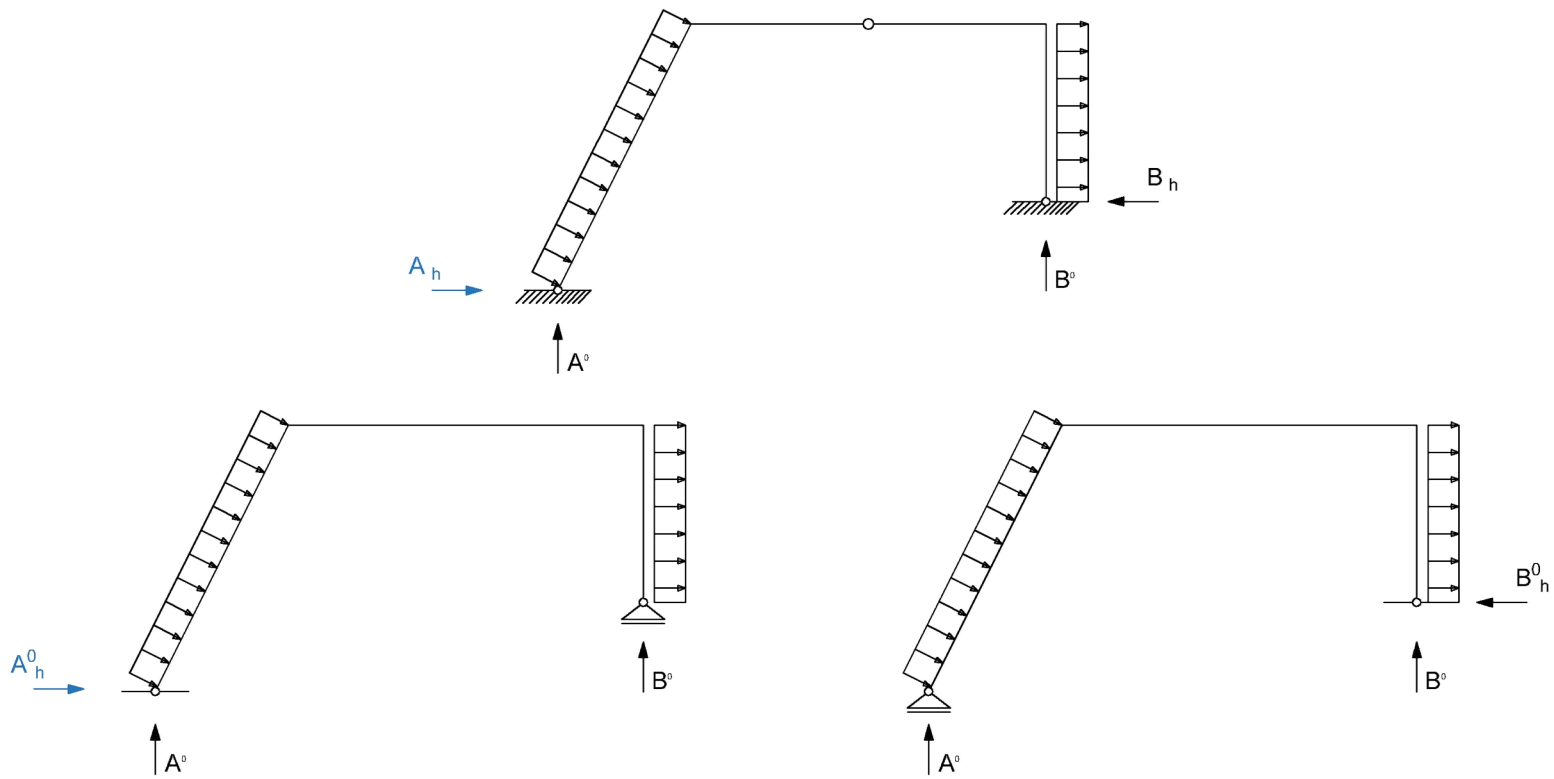


Supported by Croatian science foundation



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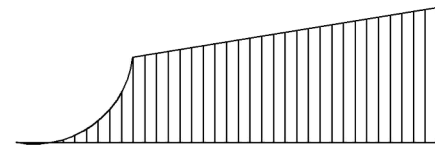
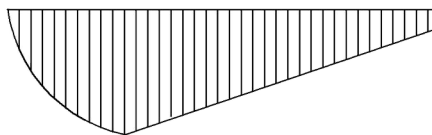
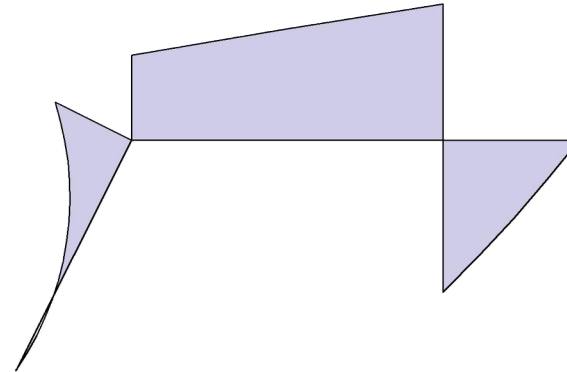
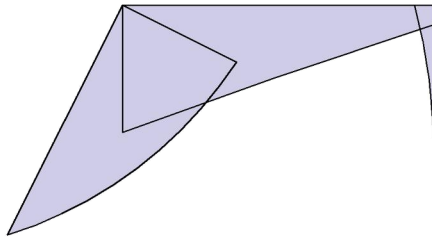
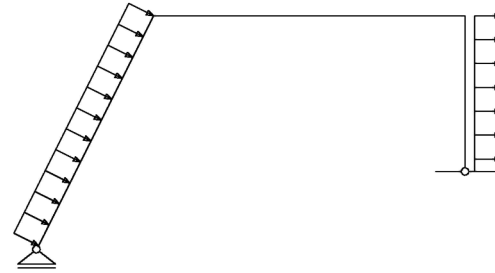
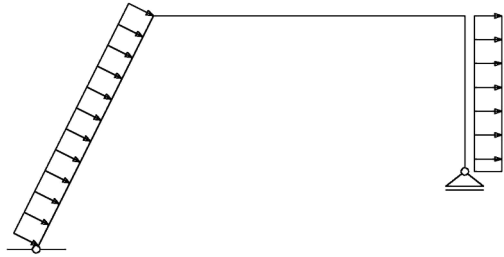




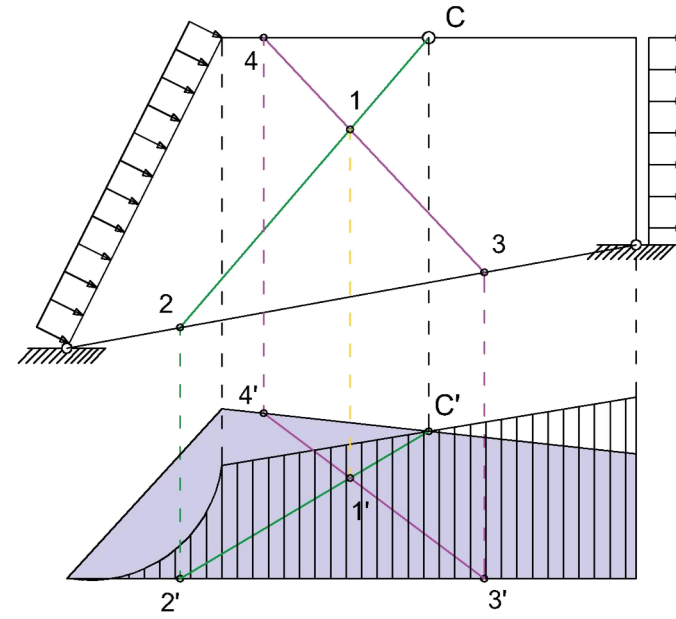
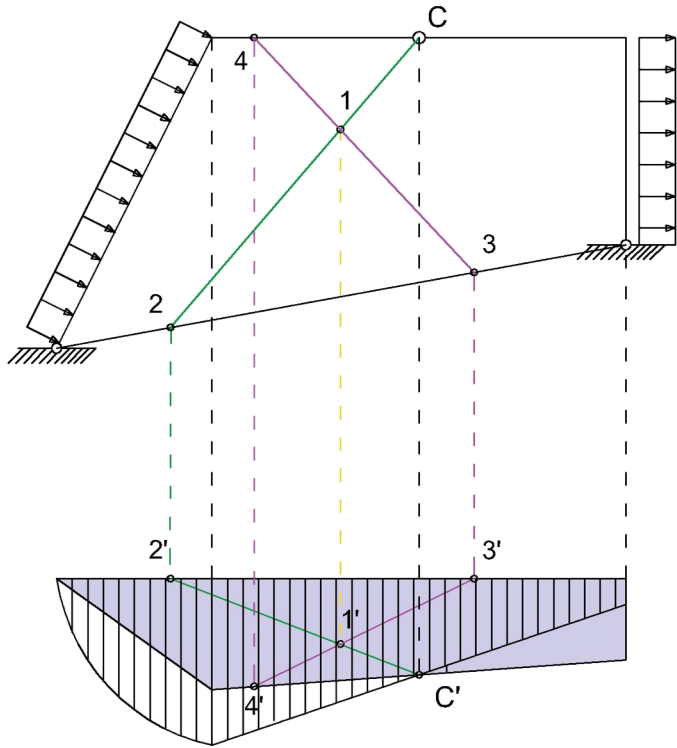
$$\begin{aligned}
 M(x) &= M_{\ell}^0(x) - (A_h - A_h^0) h(x) \\
 &= M_{\ell}^0(x) - M_{\ell}^H(x)
 \end{aligned}$$

$$\begin{aligned}
 M(x) &= M_r^0(x) - A_h h(x) \\
 &= M_r^0(x) - M_r^H(x)
 \end{aligned}$$

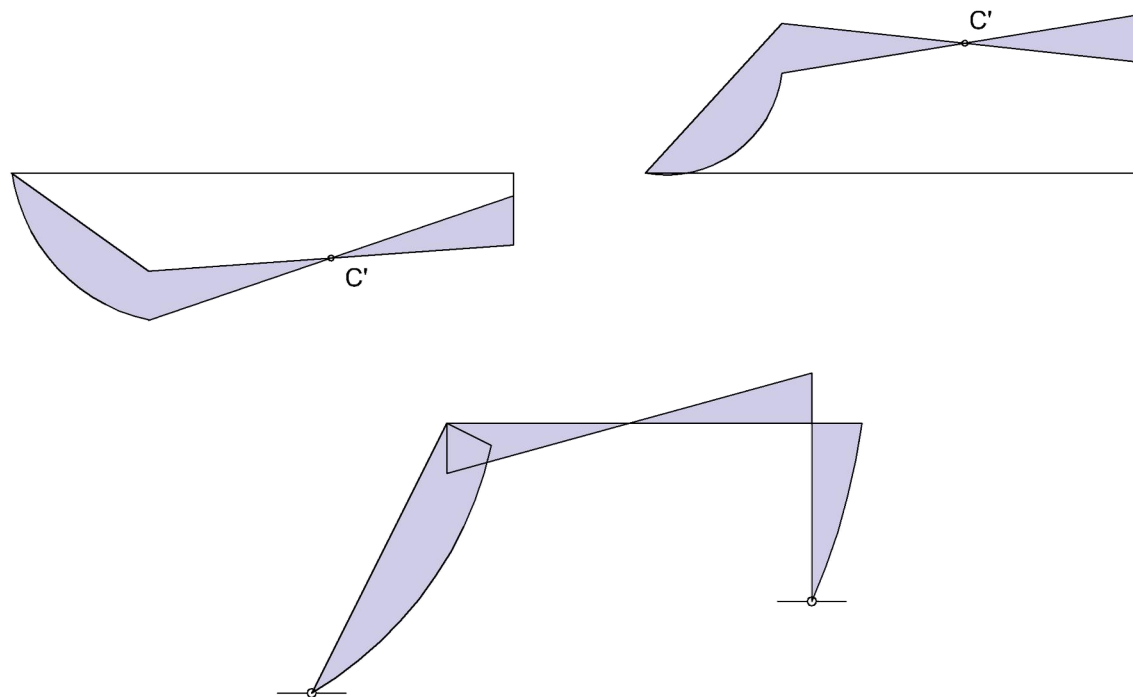
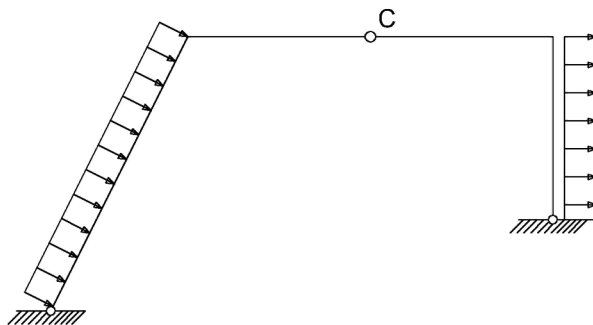




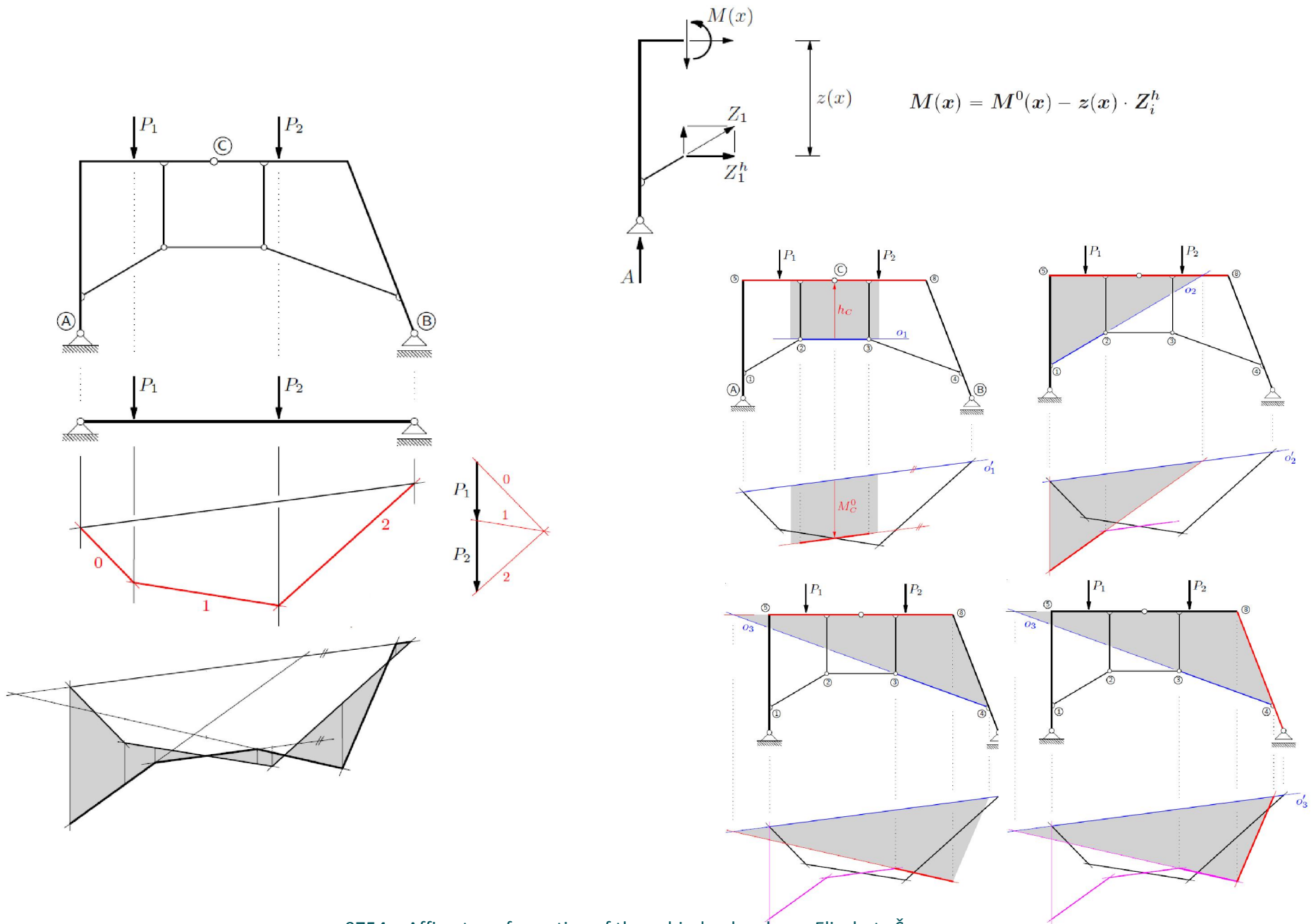
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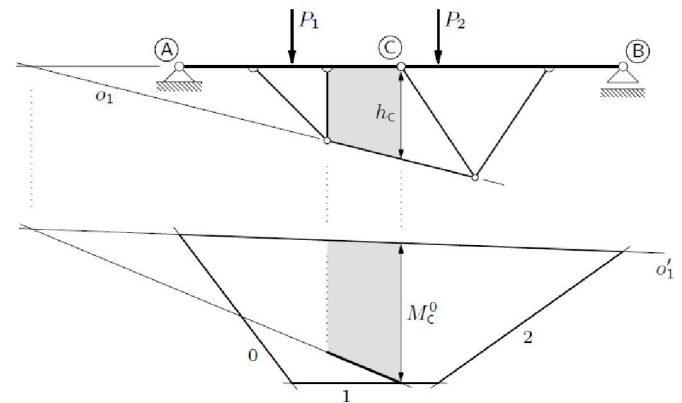
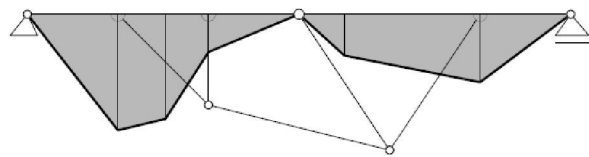
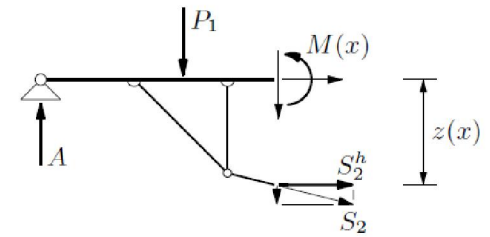
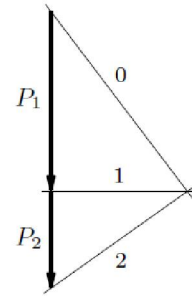
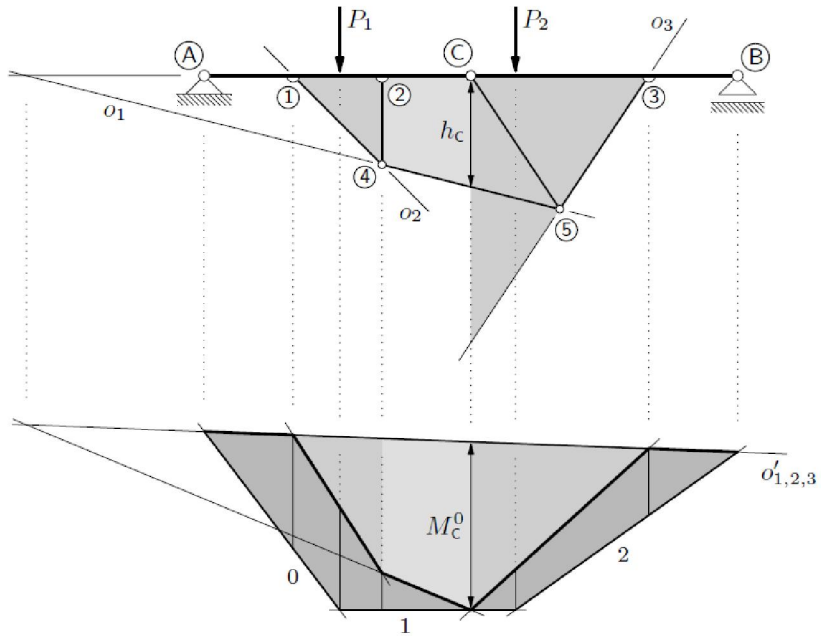


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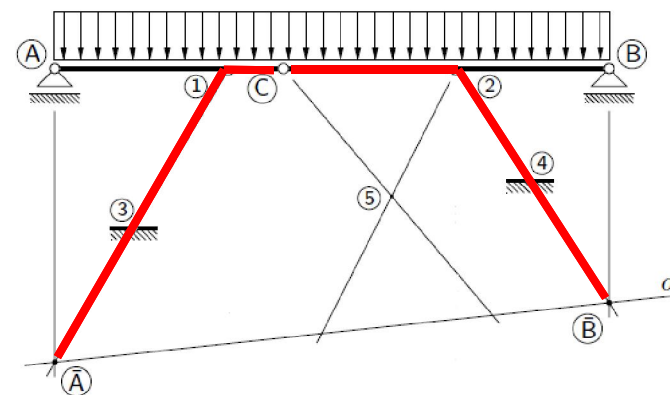
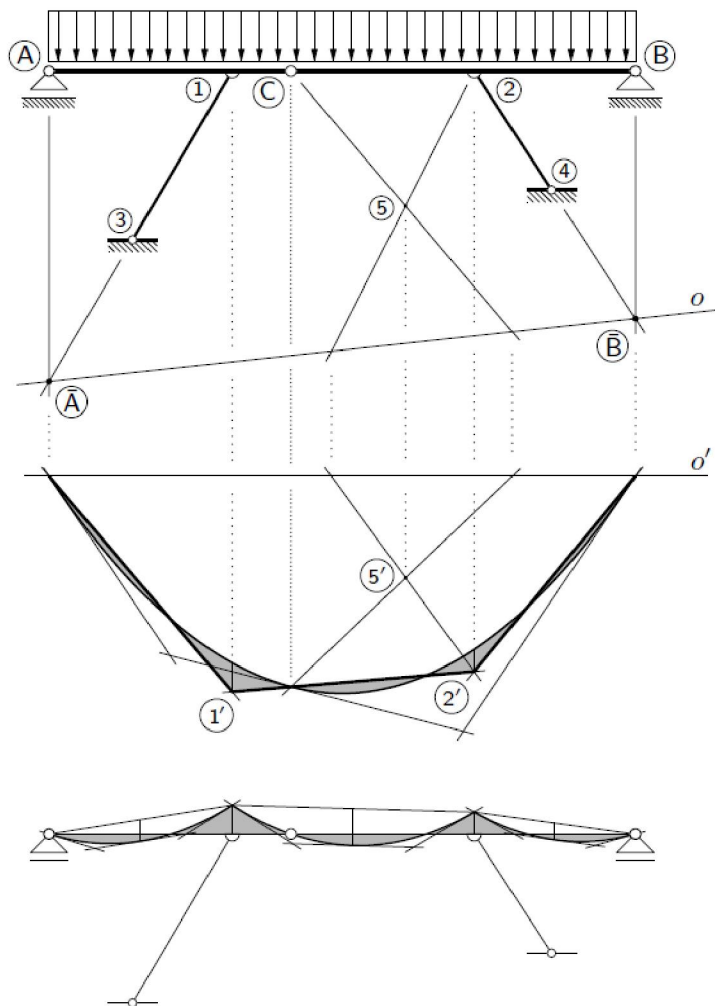
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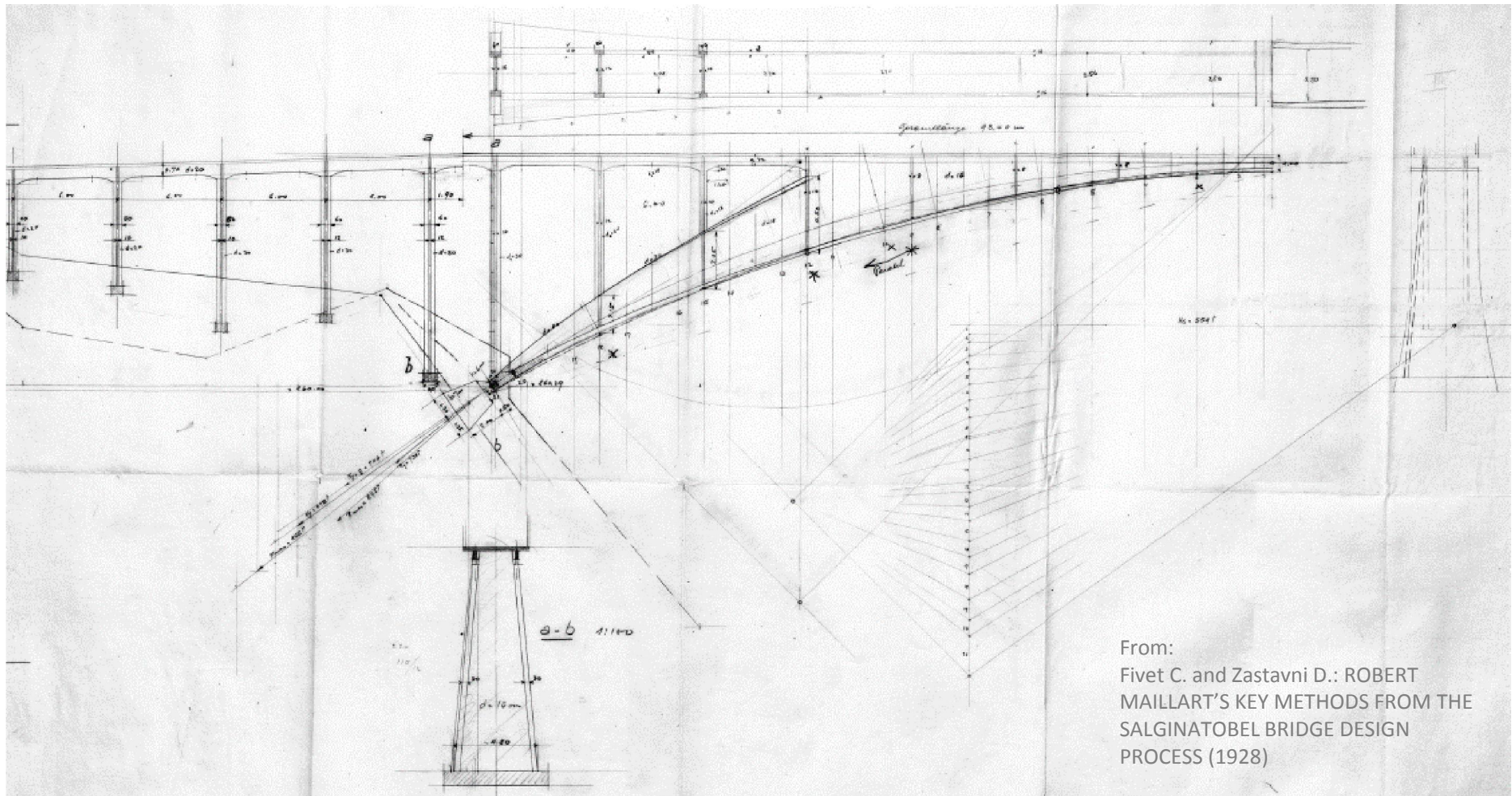
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From:
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PROCESS (1928)

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