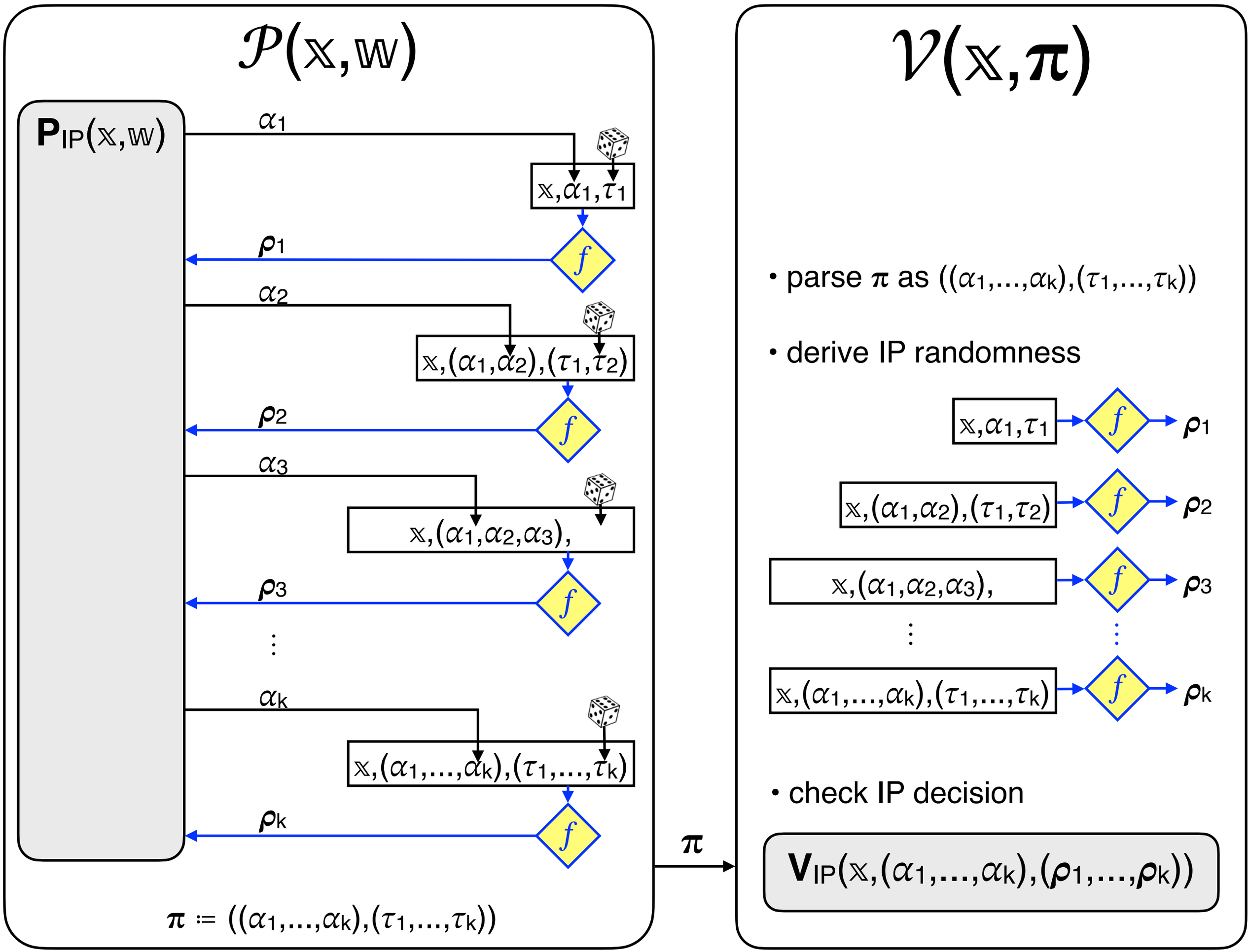
$\mathcal{P}(\mathbb{x},\mathbb{w})$
$\mathbf{P}_{\mathrm{IP}}(\mathbb{x},\mathbb{w})$
α_1
$\mathbb{x},\alpha_1,\tau_1$
ρ_1
f
α_2
$\mathbb{x},(\alpha_1,\alpha_2),(\tau_1,\tau_2)$
ρ_2
α_3
$\mathbb{x},(\alpha_1,\alpha_2,\alpha_3),$
ρ_3
α_k
$\mathbb{x},(\alpha_1,\ldots,\alpha_k),(\tau_1,\ldots,\tau_k)$
ρ_k
$\pi := ((\alpha_1,\ldots,\alpha_k),(\tau_1,\ldots,\tau_k))$
π
$\mathcal{V}(\mathbb{x},\boldsymbol{\pi})$
• parse π as $((\alpha_1,\ldots,\alpha_k),(\tau_1,\ldots,\tau_k))$
• derive IP randomness
$\mathbb{x},\alpha_1,\tau_1$
f
ρ_1
$\mathbb{x},(\alpha_1,\alpha_2),(\tau_1,\tau_2)$
ρ_2
$\mathbb{x},(\alpha_1,\alpha_2,\alpha_3),$
ρ_3
$\mathbb{x},(\alpha_1,\ldots,\alpha_k),(\tau_1,\ldots,\tau_k)$
ρ_k
• check IP decision
$\mathbf{V}_{\mathrm{IP}}(\mathbb{x},(\alpha_1,\ldots,\alpha_k),(\rho_1,\ldots,\rho_k))$