PDA_E=({a,b}, {A,B}, {p,q}, A, p, f, {Φ})

f(p,a,A) = (p,BA)
f(p,a,B) = (p,BB)
f(p,b,B) = (q, λ)
f(q,b,B) = (q, λ)
f(q,λ,B) = (q, λ)
f(q,λ,A) = (q, λ)

G_a=({a,b}, {S,pAp,pAq,pBp,pBq,qAq,qAp,qBq,qBp}, S, p), where P is given by:

P={

S::=pAp | pAq

[from f(p,a,A) = (p,BA)]

pAp::=a(pBp)(pAp)
pAp::=a(pBq)(qAp)
pAq::=a(pBp)(pAq)
pAq::=a(pBq)(qAq)

[from f(p,a,B) = (p,BB)]

pBp::=a(pBp)(pBp)
pBp::=a(pBq)(qBp)
pBq::=a(pBp)(pBq)
pBq::=a(pBq)(qBq)

[from f(p,b,B) = (q, λ)]

pBq::=b

[from f(q,b,B) = (q, λ)]

qBq::= b

[from f(q,λ,B) = (q, λ)]

qBq::= λ

[from f(q,λ,A) = (q, λ)]

qAq::= λ