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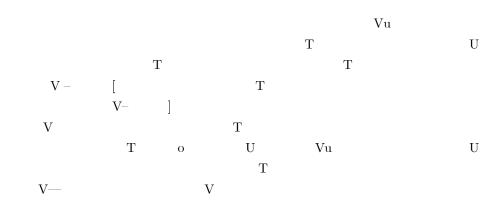
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1 Introduction

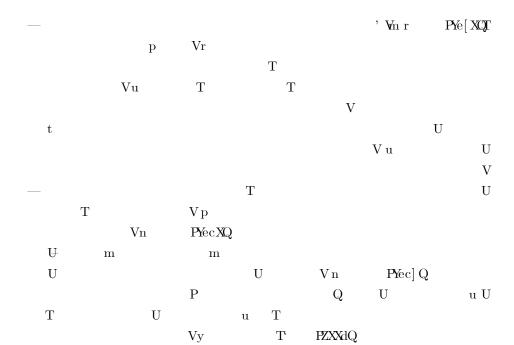
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[



2 A Simple Model



Τ V 2c < U(1) - V(1)Vu Tx r = 1Τ $r^* \in (0,1),$ Vm \mathbf{T} \mathbf{T} f $U(r^*) - V(r^*) = 2c.$ P Q \mathbf{T} $V(r^*)$ $U(r^*)$. u *c*. n U(.) V(.), $1 - r^* = \frac{(u_B + \rho_B) - (u_G + \rho_G) - 2c}{\rho_B}.$ PaQT 2c < U(1) - V(1)T V V---X U Vu TJ J J\[\vartheta \] J VuPVVu o QT \mathbf{T} JV u J \mathbf{T} $k^b \ q$ Τ Vu \mathbf{T} \mathbf{T} VuU V-Τ Ρ $Q\Gamma$ V---Т r, V

Т

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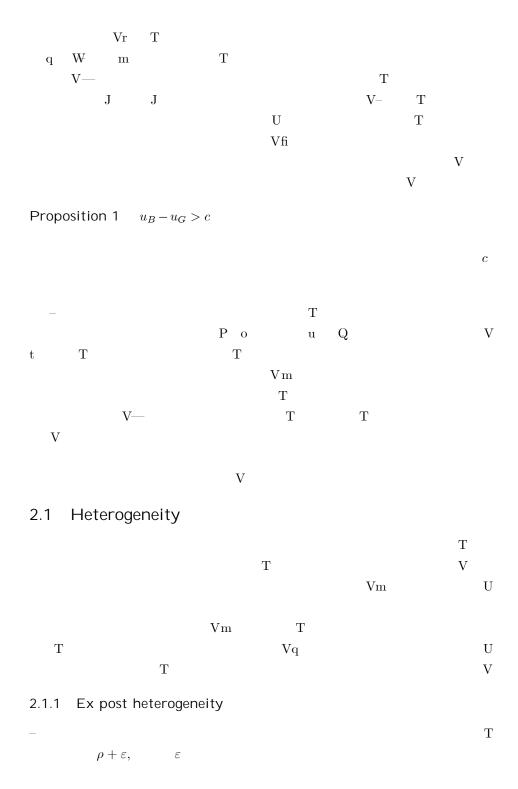
$$W(r) = \frac{1}{1+r}U(r) + \frac{r}{1+r}V(r) - c\frac{1-r}{1+r}. \qquad \text{PaQ}$$

$$- \qquad \qquad \frac{1}{1+r}$$

$$V(r), \qquad \qquad V(r), - \qquad T$$

$$V = \qquad \qquad V = \qquad \qquad V = \qquad V$$

 $\begin{array}{cccc} & & \text{Vu} & & \text{T} & & \\ \text{T} & & & & \text{Y} \\ \text{T} & & & & \rho_B + \rho_G \end{array}$



$$F(.), \qquad [0,e]. \\ T \qquad \qquad V \\ P \qquad QT \qquad T \\ Vm \qquad i \qquad j, \qquad T \\ Vm \qquad i \qquad j, \qquad T \\ Tn \qquad o \qquad PreecQYm \\ \qquad Vu \qquad Vu \qquad T \\ \qquad Vu \qquad r \leq 1T \\ T \qquad \qquad T \\ \qquad \qquad Vu \qquad r \leq 1T \\ T \qquad \qquad T \qquad T \qquad T \\ \qquad \qquad V - \qquad T \qquad T \qquad T \\ \qquad V - \qquad T \qquad \qquad T \qquad T \\ \qquad V - \qquad T \qquad \qquad T \qquad T \\ \qquad V - \qquad T \qquad \qquad V - \qquad T \\ \qquad V - \qquad T \qquad \qquad V - \qquad T \\ \qquad V - \qquad T \qquad \qquad V - \qquad T \\ \qquad V - \qquad T \qquad \qquad V - \qquad T \\ \qquad V - \qquad T \qquad V - \qquad T \\ \qquad V - \qquad V + \qquad V \\ z \qquad T \qquad \qquad Vr \qquad T \qquad U_B - u_G - 2c < 2\rho, \qquad r \\ \qquad V + \qquad V \qquad V \\ 2.1.2 \quad Ex \ ante \ heterogeneity \qquad \qquad U \qquad V \times \\ \qquad \mu \qquad Y \qquad . \ m \qquad T \qquad V \times \\ \qquad \qquad V \qquad P \qquad QTH \qquad L, \qquad \mu \qquad Y \qquad . \ m \\ \qquad T \qquad V \times \qquad P \qquad QTH \qquad L, \qquad V \times \\ \qquad V \times \qquad P \qquad QTH \qquad L, \qquad V \times \\ \qquad V \times \qquad P \qquad QTH \qquad L, \qquad V \times \\ \qquad V \times \qquad P \qquad QTH \qquad L, \qquad V \times \\ \qquad V \times \qquad V \qquad V \qquad V \qquad V \qquad V \qquad V \times \\ \qquad V \times \qquad V \times \qquad V \times \\ \qquad V \times \qquad V \times \qquad V \times \\ \qquad V \times \qquad V \times \qquad V \times \\ \qquad V \times \qquad V \times \qquad V \times \\ \qquad V \times \qquad V \times \qquad V \times \\ \qquad V \times \qquad V \times \qquad V \times \\ \qquad V \times \qquad V \times \qquad V \times \\ \qquad V \times \\ \qquad V \times \\ \qquad V \times \qquad V \times \\ \qquad V \times \\ \qquad V \times \qquad V \times \\ \qquad$$

$$\rho^i$$

$$i, \quad i \in \{L, H\}.$$
m
$$o \quad \qquad \qquad \forall$$

$$V u$$

$$PVV \quad u_B + \rho^L < u_G + \rho^H),$$

$$c \quad \qquad T \quad \qquad Tr_H^*,$$

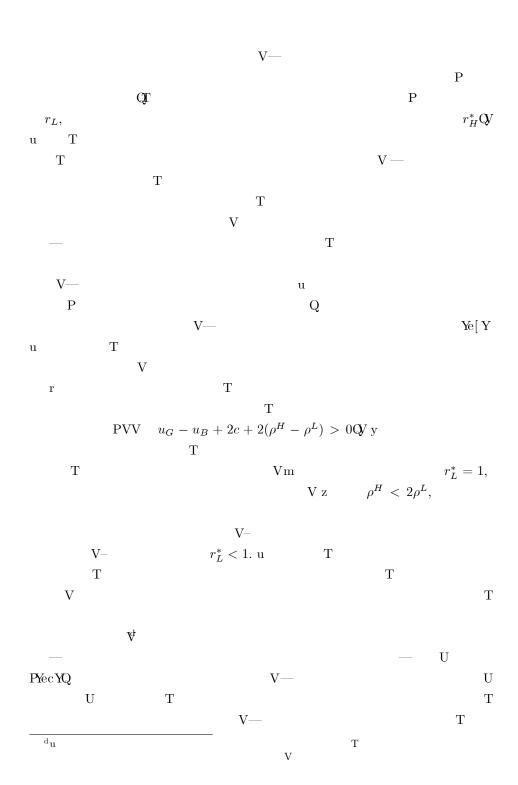
$$u_B + r_H^* \rho^H + (1 - r_H^*) \rho^L - 2c = u_G + \rho^H.$$
 PY] Q

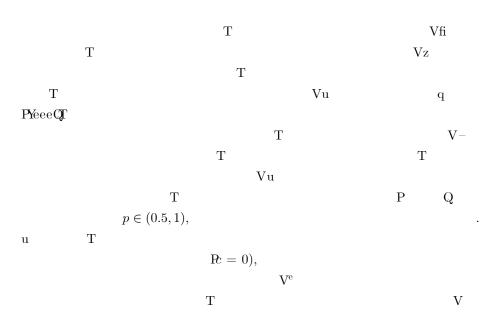
 $Tr_H^* < 1 \quad u_B - u_G > 2c.$ $r_{L}, \\ \frac{r_{L}}{r_{L}(1-r_{H}^{*})}\mu \\ \left[\frac{r_{L}}{1+r_{L}} - \frac{1-r_{H}^{*}}{1+r_{H}^{*}}\mu\right] \\ Vo$ \mathbf{T}

 \mathbf{T} V

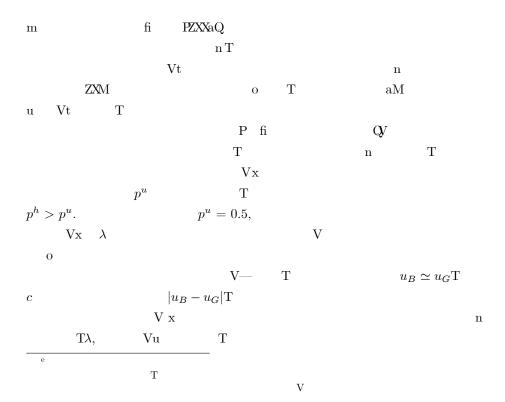
$$U^{L}(r_{L}, r_{H}^{*}) = u_{B} + \min \left\{ r_{L} - \frac{(1 + r_{L})(1 - r_{H}^{*})}{1 + r_{H}^{*}} \mu, 1 \right\} \rho^{L}.$$
 PYaQ

 $V^{L}(r_{L}, r_{H}^{*}) = u_{G} + \frac{(1+r_{L})(1-r_{H}^{*})}{r_{L}(1+r_{H}^{*})} \mu \rho^{H}$ $+\min\left\{ rac{1+r_{H}^{*}}{\left(1+r_{H}^{*}\right)r_{L}-\left(1+r_{L}\right)\left(1-r_{H}^{*}\right)\mu},1
ight\}
ho^{L}.$ PYbQ $r_L^* = 1. \text{ fi}$ u $|U^L(1, r_H^*) - V^L(1, r_H^*)| < 2c$, $|U^L(1, r_H^*) - V^L(1, r_H^*)| = 2c.$ $(u_B, u_G \qquad c)$ V t





2.2 Hepatitis B and the sex ratio



V

$$T$$
 TVV $V \lambda$, $V-$

$$p^{j}U(r^{*}) + (1-p^{j})V(r^{*}) - 2c = V(r^{*}),$$
 PYdQ

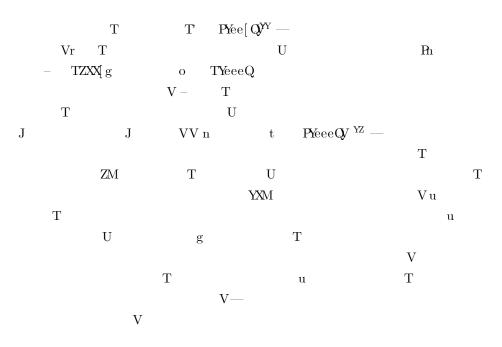
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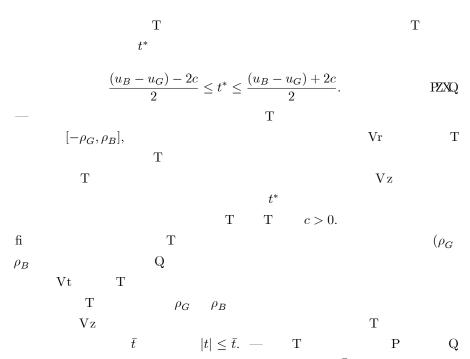
3 Bride Prices

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3.1 Walrasian Markets



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3.2 Frictional Matching

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m T}$ Τ i V mΤ μ , $x\mu$, fl ${\rm T}$ U \mathbf{T} $m(x\mu,\mu)$. — $\mathrm{PVV} m(y,z) = m(z,y))$ U μ . m $T \quad \alpha(x) = m(x, 1)$ Τ $\alpha(x)$ $x\alpha$. u $x, \qquad x\alpha(x)$ x, VV V r \mathbf{T} \mathbf{T} $Ts(x) = \alpha(x) + x\alpha(x),$ у TVVs(x)V Q x x < 1 P Vx > 1). Τ Vs $U^m = \frac{u_B + \rho - t}{i},$ PZZQ $\rho_G = \rho_B = \rho$. Y u_B $\hat{t} = t + \rho - \rho_G.$

$$V^m = rac{u_G +
ho + t}{i}.$$
 PZ[Q — T x J J t

$$iU(x,t) = u_B + x\alpha(x)(U^m - U).$$
 PZ Q

$$U(x,t) = \frac{u_B}{i} + \frac{x\alpha}{i(x\alpha + i)}(\rho - t).$$
 PZaQ

Τ

$$V(x,t) = \frac{u_G}{i} + \frac{\alpha}{i(\alpha+i)}(\rho+t).$$
 PZbQ

V —

$$U(x,t)$$
 $U(x,t)$. Ya

T

 $\mathrm{T}t^*$,

Τ

f

$$U^m(t^*) - U(x,t^*) = V^m(t^*) - V(x,t^*). \tag{PZcQ} \label{eq:power_power}$$

x:

$$t^*(x) = \frac{\rho(1-x)\alpha(x)}{\alpha(x)(1+x) + 2i}.$$
 PZdQ

$$x$$
 V— $\tilde{U}(x) = U(x, t^*(x))$

$$\tilde{U}(x) = \frac{u_B}{i} + \frac{2\rho x \alpha(x)}{[\alpha(x)(1+x) + 2i]i}.$$
 PZeQ

$$\tilde{V}(x) = \frac{u_G}{i} + \frac{2\rho\alpha(x)}{[\alpha(x)(1+x) + 2i]i}.$$
 If XQ

 $\overline{\mathrm{Ya}}_{\mathrm{m}}$ Т V— Vm ${\bf T}$

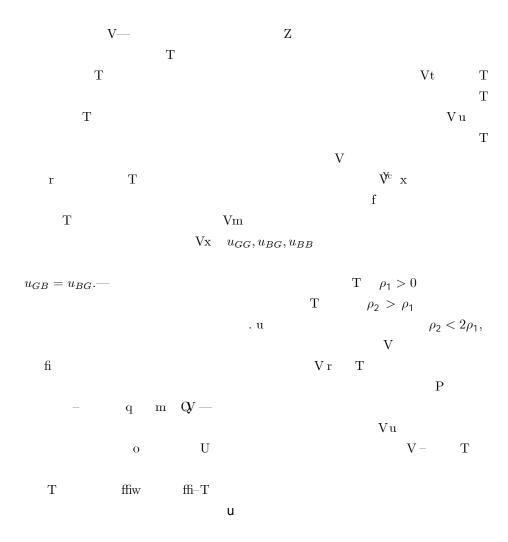
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Τ Ρ Qx^* $\mathbf{T} c \mathbf{f}$ $\tilde{U}(x^*) - \tilde{V}(x^*) = 2c.$ P/YQ T $x = 1, \tilde{U}(1) - \tilde{V}(1) = \frac{u_B - u_G}{i} P$ $u_G > 2ci.$ r $T\alpha(x) = x\alpha(x)$ x = 1V $g,^{
m Yb}$ \mathbf{T} $Vx = \mu$ δ . — $\alpha x\mu + \delta \mu = (1 - \theta)g.$ P_i ZQ $\alpha x\mu + \delta x\mu = \theta g.$ $P_{\rm I}$ [QT θ $\theta(x) = \frac{g + \delta\alpha(x - 1)}{2g}.$ $P[\] Q$ $T x^*$ \mathbf{T} $\theta(x^*)$. x, W(x). — $W(x) = (1 - \theta(x))\tilde{U}(x) + \theta(x)\tilde{V}(x) - (1 - 2\theta)c.$ PaQ $W'(x) = \left\{ (1 - \theta)\tilde{U}'(x) + \theta\tilde{V}'(x) \right\} + \left\{ \theta'(x)[\tilde{V}(x) + 2c - \tilde{U}(x)] \right\}.$ $P_{l} bQ$ J X Ρ Q V

$$\frac{dW^*}{dc} = \frac{\partial \tilde{V}}{\partial x} \bigg|_{x=x^*} \frac{dx^*}{dc} + 1.$$

$$= \frac{2\tilde{V}'(x)_{|x=x^*}}{2}$$

4 Family Balancing Considerations



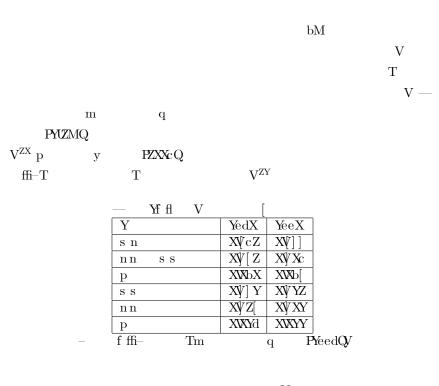
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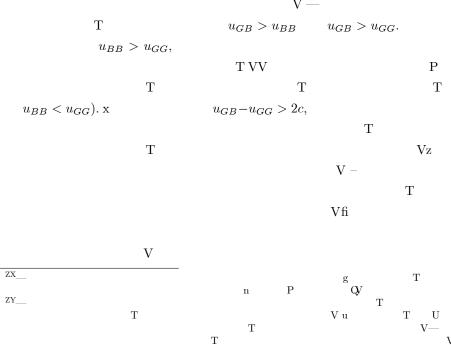
 $P\rho_2 < 2\rho_1$

 $(u_{BB} - u_{BG} < u_{BG} - u_{GG} \mathbf{Qr}_G < r_B.$

```
TV_{BB}(r_G) - V_{BG}(r_G) < 2c 	 r_G,
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                                                                                     V
\mathbf{u}
                                            r_G
                                                              Τ
             r_G. — T r_G \geq 3/5,
                                                                                  r_G.
         T r_G < 3/5,
                                                                   r_{B}.
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4.2 Societies without generalized gender bias

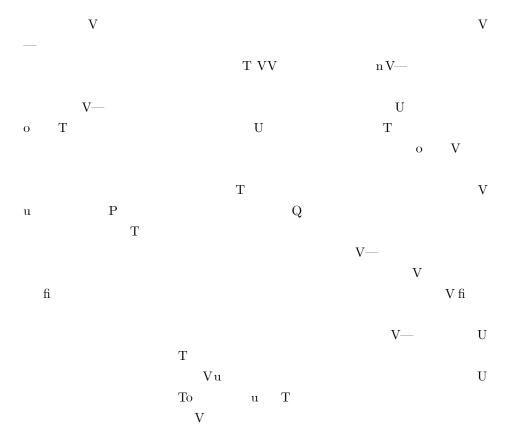




Proposition 3
$$u_{GB} - u_{BB} < 2c < u_{GB} - u_{GG}$$
 $\max\{r_G^*, r_B^*\} < 1,$

$$[u_{BG}-u_{GG}-2c]-2[\rho_2-\rho_1]<0. \qquad (u_{BB}-u_{BG}-2c)+(u_{GG}-u_{BG}-2c)>0,$$

5 Conclusions



6 Appendix

$${
m T\,VV}$$
 $r=1.\ {
m r}$

 $r \leq 1$,

$$W(r) = \frac{1}{1+r} \left[u_B + r(\rho + \mathbf{E}(\varepsilon)) \right] (r) + \frac{r}{1+r} \left[u_G + \rho + \mathbf{E}(\varepsilon | \varepsilon \ge F^{-1}(1-r)) \right] - c \frac{1-r}{1+r}.$$
PaXQ

$$W(1) - W(r) = \frac{1 - r}{2(1 + r)} \left\{ u_G + 2c - u_B + 2\rho + 2\mathbf{E}(\varepsilon) - 2r\mathbf{E}(\varepsilon|\varepsilon \ge F^{-1}(1 - r)) \right\}.$$
PayQ

$$\mathbf{E}(\varepsilon) - r\mathbf{E}(\varepsilon|\varepsilon) \ge F^{-1}(1-r) = \int_{0}^{\varepsilon} \varepsilon dF - \int_{F^{-1}(1-r)}^{\varepsilon} \varepsilon dF \ge 0, \qquad \text{PaZO}$$

$$W(1) - W(r) > 0 \qquad u_G + 2c - u_B + 2\rho > 0 \qquad r < 1. - \qquad \text{T}$$

Proof of Proposition [f

u
$$r_G^* > r_B^*, r_G^*$$

 $ext{T}$ $ext{V-}$ $ext{T}$ $ext{} r_G^* < r_B^*, \qquad r_B^* ext{T}$ $ext{V}$ $ext{T}$ $ext{V}$ $ext{x}$ $ext{$\lambda_i$}$

U

 $i, i \in \{G, B\}. \ \mathbf{x}$ $\lambda = \lambda_G - \lambda_B$ $\mathbf{T} \quad \lambda$

W(1) - W(r) > 0 r > 1.

 $\lambda = \lambda_G - \lambda_B$ $r \qquad \qquad r = \frac{4-\lambda}{4+\lambda}.$

$$W(\lambda, \lambda_B) = \frac{1 - \lambda - \lambda_B}{4} V_{GG} + \frac{1 - \lambda_B}{4} V_{BB}(r(\lambda)) + \frac{2 + \lambda + 2\lambda(B)}{4} V_{BG}(r(\lambda)) - \frac{2\lambda(B) + \lambda}{2} c.$$

$$\operatorname{Pa}[Q]$$

 $\begin{array}{c} \lambda \\ \text{V} \\ \frac{\partial W}{\partial \lambda} = \frac{1}{4}[V_{BG} - V_{GG} - 2c] + \frac{1-\lambda_B}{4}\frac{\partial V_{BB}}{\partial \lambda} + \frac{2+\lambda+2\lambda_B}{4}\frac{\partial V_{BG}}{\partial \lambda}. & \text{Pa] Q} \\ - & r_G^*. \text{ u} & \text{T} \\ & \text{U} \\ & & V^- & V_{BB} & V_{BG} \\ & \lambda & & \rho_1 > 0 & \rho_2 - \rho_1 > 0, \\ & W & \lambda & & \text{V} \\ - & & & \chi_{B}^*, & \text{U} \\ & & & \lambda & \lambda_G, \hat{W}(\lambda, \lambda_G). - \\ & & & \lambda & & \lambda_G, \hat{W}(\lambda, \lambda_G). - \\ & & & & \lambda & & \lambda_G, \hat{W}(\lambda, \lambda_G). - \\ & & & & & \lambda_G, \hat{W}(\lambda, \lambda_G). - \\ & & & & \lambda_G, \hat{W}(\lambda, \lambda_G). - \\ & & & & \lambda_G, \hat{W}(\lambda, \lambda_G). - \\ & & & & \lambda_G, \hat{W}(\lambda, \lambda_G). - \\ & & & & \lambda_G, \hat{W}(\lambda, \lambda_G). - \\ & & & & \lambda_G, \hat{W}(\lambda, \lambda_G). - \\ & & & & \lambda_G, \hat{W}(\lambda, \lambda_G). - \\ & & & & \lambda_G, \hat{W}(\lambda, \lambda_G). - \\ & \lambda_G, \hat{W}$

References

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