Narratives and the Economics of the Family

Robert Akerlof (Warwick and CEPR) Luis Rayo (Northwestern and CEPR)

September 11, 2020

- Over past century, big changes in US family structure:
 - Cohabitation now commonplace.
 - Majority of women now work outside the home.
 - Single parenthood has skyrocketed.
 - Gay marriage has been legalized (2015).

- We also see pronounced cross-sectional differences in attitudes and behaviors across families:
 - Some families look more "modern."
 - Others look more "traditional."

► This variation across families—over time and in the cross section—may, in part, reflect economic differences.

▶ But it also seems to reflect more fundamental differences in what families deeply value.

In this paper:

- We augment Becker's classic model in order to account for such heterogeneity across families.
 - ► We suppose that in addition to caring about consumption, families wish to further a subjective story—or narrative.
 - ► This story will capture the family's deeply-held values.
 - For the most part, we treat the story as exogenously given.

We focus on two stories that in many ways are polar opposites:

1. "Protector Narrative"

- Produces "traditional" type of family.
- Strong gender norms.
- Members cast into two distinct roles; men and women pushed toward separate spheres.
- Men expected to act tough and be authoritarian.

"Fulfillment Narrative"

- Produces a "modern" type of family.
- Roles are less distinct; family members have greater latitude in their decisions.
- Marriages based to a greater extent on romantic love.

- Main takeaway: each type of story leads to a distinctive bundle of behaviors.
- These bundles can even include non-economic practices that are inconsistent with the standard model.

For instance, families may:

- Sacrifice careers (and even happiness) of women for sake of maintaining purity (Friedan's "problem that has no name").
- Under-invest in womens' human capital and assign members to roles based on gender rather than talent.
- Forbid children from entering same-sex marriages.

A Note on Methodology

This paper is a marriage between:

- Economic theory, which emphasizes parsimony + rigor, and
- Sociology, whose core methodology involves understanding peoples' behavior through the lens of their narratives.

Our goal is to take such narratives seriously and uncover their interaction with economic forces.

A Note on Methodology

We believe our model better captures how people think than a standard Beckerian model.

But we do not wish to suggest that all families we term "traditional," or all families we term "modern," think the same or are fully captured by our model.

Finally, our exercise is purely positive: the aim is not to pass judgments.

Related Literature

"Family Models": Lakoff (1996, 2008), Stiehm (1982), Young (2003), Cahn and Carbone (2010).

Role of Culture/Norms: see Jayachandran (2015), Giuliano (2018), and Bertrand (2020) for reviews.

Ideological types: Enke (2019), Draca and Schwarz (2018).

Narratives: Akerlof and Shiller (2015), Shiller (2017), Morson and Schapiro (2017), Mukand and Rodrik (2018), Benabou et al. (2018), Michalopoulos and Xue (2019), Eliaz and Spiegler (2020).

For motivation, we present a stylized fact:

- ► Family behaviors and beliefs tend to bundle together into rather specific packages, depending on a family's "type."
- ► Take a group of people and ask them two questions:
 - 1. "Is sex before marriage wrong?"
 - 2. "Is it better for men to work and women to tend home?"
- Now classify respondents into two bins, depending on their responses. Call the bins "traditional" and "modern."

Table 1: Classification Exercise (GSS) wvs

Variable	Traditional – Modern (average)
Sex before marriage: always wrong [†]	1.924***
Better for man to work, woman tend home: strongly agree [†]	0.796***
Being a housewife as fulfilling as paid work: strongly agree	0.315***
Bad marriage better than none at all: strongly agree	0.227***
Homosexual sex relations: always wrong	0.933***
Can people be trusted: can't be too careful	0.071***
Should children be obedient or think for themselves: obedient	0.491***
Favor spanking to discipline child: strongly agree	0.328***
Ever married [‡]	0.136***
Age when first child born [‡]	-0.795***
Percentage of same gender in occupation [‡]	0.036***
Have gun in home [‡]	0.066***

GSS respondents are classified as modern or traditional using the k-means algorithm (see Online Supplement for further details). Questions used to cluster are marked with †. All variables without ‡ have been standardized. Response after the colon (:) corresponds to the largest numeric value of the variable. Standard errors are heteroskedasticity robust. *** 0.01, ** 0.05, * 0.1.

Authoritarian husband/father: predictive of "traditional" type.





A male nurse: predictive of "modern" type.



Family has $N \ge 2$ members; must choose a job for each one.

A job is described by its wage w.

Each family member i is qualified for any job in interval $[0, w_{max}]$.

Let w_i denote i's job, w_0 per-capita unearned income.

Income is split equally, so each member receives: $\bar{w} + w_0$.

Choice of jobs results in an "outcome" for family member i:

$$V_i = u(\bar{w} + w_0) + S(w_i).$$

consumption utility story utility

 $u(\cdot)$ is increasing, strictly concave.

The shape of $S(\cdot)$ comes from the family's story.

Family members fully internalize each other's outcomes.

Thus, the family's objective is to maximize the average outcome:

$$\bar{V} = u(\bar{w} + w_0) + \bar{S}.$$

Observe that \bar{V} depends upon the family's job selection only through \bar{w} and \bar{S} .

► We will solve the model under two alternative stories: the "protector narrative" and the "fulfillment narrative."

- These two narratives are by no means arbitrarily.
 - They distill and formalize narratives widely studied in sociology, anthropology, and political science.

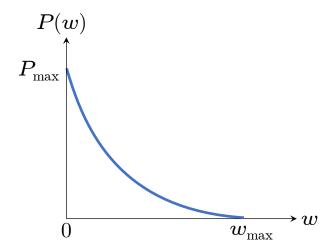
The Story (briefly told):

Purity (lack of corruption) is valuable and worthy of protection. The world is dangerous, full of corrupting influences.

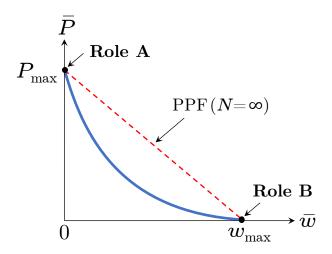
- Narratives concerning purity and pollution are widespread and well studied.
 - ► See Douglas (1966), Kristeva (1980), Haidt (2012).

- Virtually every culture has specific ideas of what is "dirty" and has prescriptions for avoiding contamination.
- Sources of pollution may include:
 - Sexual contact.
 - Exposure to "untouchable" individuals.
 - Immoral acts (often seen as "stains").
 - Certain forms of knowledge.

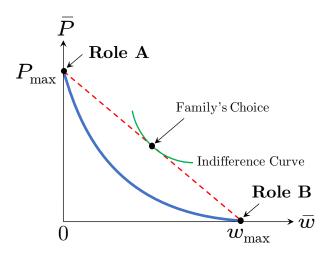
We assume associated with each job w, there is a purity level P(w), which is decreasing and convex. This is the story utility.



The family's "production-possibility frontier":



Solution:



Role A: Protected



Role B: Breadwinner



"Separate Spheres"

As we argue in the paper, strong tendency for roles to become gendered.

- ► The model thus helps us understand a view that has held sway in many societies, over many time periods:
 - ▶ Women and men should occupy "separate spheres."
 - In this view, a woman's "proper place" is the domestic sphere.
 - A man's is the public sphere.

Protected Work

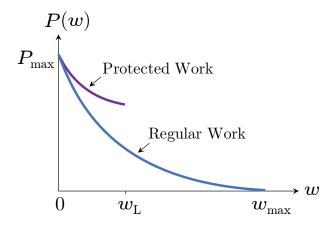
Some occupations may be attractive, in part, because they involve low levels of exposure.

At the same time, they may not pay especially well.



Protected Work

Suppose there are two types of work: "regular" and "protected."



The Story (briefly told):

Fulfilling individual desires is important. The world is full of opportunity.

Shifts emphasis away from ideas of purity and corruption.

Instead, it encourages pursuit of individual desires and views outside world as a place where these desires can be fulfilled.

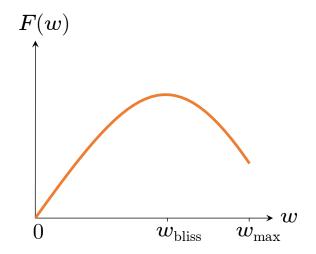
At a deeper level, this narrative emphasizes "naturalness" over "purity."

Desires, being part of one's nature, are seen as valid.

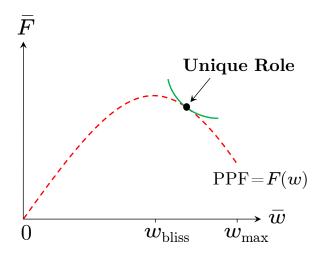
- ▶ In the US, this narrative shot to prominence in the 1960s.
- Impetus behind the period's countercultural movements, including the Women's Movement and the Hippie Movement.

- Psychotherapy, drawing on Jung, Winnicott, and Erikson: encouraged "self realization" and "finding one's true self."
- Friedan (student of Erikson's): women needed to be free to find their true selves through careers.
- Notions of fulfillment have fueled the recent rise of "workism," which emphasizes career as primary source of identity.

We assume associated with each job there is a fulfillment level F(w), as below. This is the story utility now.



Solution to the family's problem:



The fulfillment narrative can give rise to equal marriages.



And roles where fulfillment is prioritized over other objectives.



Marriage

Suppose two individuals must decide whether to marry or remain single.

Payoff when single: V_i .

Payoff when married (or otherwise part of a family):

$$ar{V} + lpha$$
 .

$$\begin{picture}(20,2) \put(0,0){\line(1,0){100}} \pu$$

Two reasons to marry: (1) affinity term; (2) potential gains from specialization.

Marriage

Proposition

In the marriage model:

- i. Under the fulfillment narrative, marriage occurs if and only if there is positive affinity: $\alpha > 0$.
- ii. Under the protector narrative, the affinity threshold for marriage is less than zero.

Leads to higher marriage rate under protector narrative.

Marriage

► Recall from Table 1: marriage rate is 13% higher among "traditional" types.

According to Cherlin (2014):

"To most...nineteenth century men and women, marrying someone because of strong romantic feelings was considered risky."

▶ Modern dating system only became widespread in early to mid 20th century (see Bailey, 1988 and Modell, 1989).

Gender Norms

Our model is also capable of endogenizing gender norms, by assuming that individual has a desire to "fit" their genders.

Our core predictions:

1. In protector families, gender norms will lead to a pecking order in the assignment of roles.

2. Gender norms will be stronger in protector families than in fulfillment ones.

Gender Norms

Define "gender fit" Φ_i as follows:

$$\Phi_i = -\frac{1}{2} \underbrace{(w_i - W_i)^2}_{\text{distance from own gender}} + \underbrace{\frac{1}{2} \underbrace{(w_i - W_{-i})^2_{,i}}_{\text{distance from opposite gender}}$$

where W_i is average population wage of others of the same gender.

Captures the idea that gender fit is both about being like one's own gender and unlike the opposite gender.

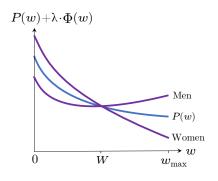
Gender Norms

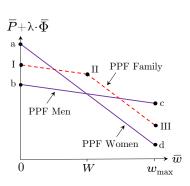
Assume that each family member's outcome is:

 $\lambda \geq 0$ denotes the importance of gender fit.

Gender Norms: Protector Families

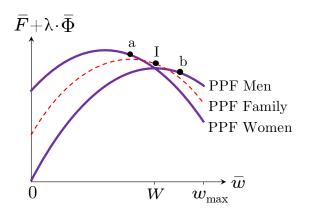
Suppose men on average earn more than women. This leads to a "rotation" of the purity functions.



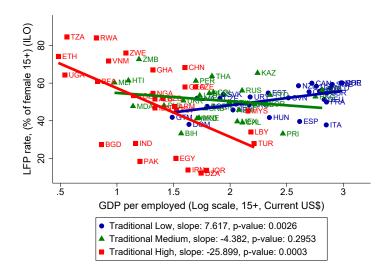


Gender Norms: Fulfillment Families

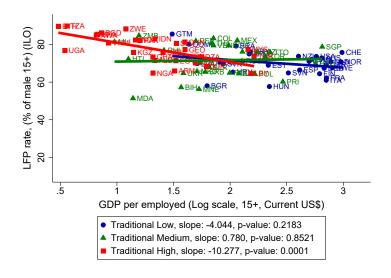
In the fulfillment case, a desire for gender fit also "rotates" the fulfillment functions. Here gender differentiation is much weaker.



Female LFP



Male LFP



Gender Norms and Marriage

Consider protector families (where gender norms are strong).

So long as a pair consists of a man and a woman, gender norms create additional gains from specialization.

▶ Hence, gender norms can further raise the marriage rate.

► There are some exceptions, though, where gender norm can in fact make marriage *less* desirable.

Gender Norms and Marriage: Crisis of Masculinity

 Labor market outcomes of working-class men have deteriorated significantly (see Binder and Bound, 2019).

- At the same time, dramatic changes in family structure (see McLanahan, 2004):
 - Decline in marriage rates.
 - Increase in single parenthood.

Gender Norms and Marriage: Crisis of Masculinity

▶ This pattern is consistent with our model.

Among protector individuals, reduced male earning potential may reduce the attractiveness of marriage.

When gender norms are strong, a man with a low earning potential performs "poorly" in both roles A and B.

Gender Norms and Marriage: Same-sex Marriage

► In our GSS sample, "traditional" types are considerably less tolerant of homosexuality.

More likely to say homosexual relations wrong (1.06 sd's, p = 0.000).

More likely to oppose gay marriage (0.71 sd's, p = 0.000).

Gender Norms and Marriage: Same-sex Marriage

Our model helps account for this phenomenon.

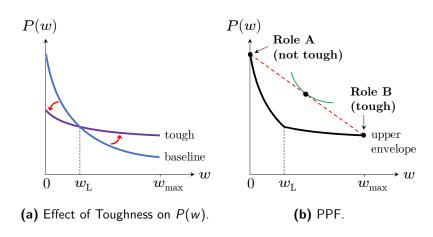
▶ If a same-sex pair specializes into Roles A and B, one member violates a gender norm, thus lowering the value of marriage.

Toughness

- Some types of human-capital investments are akin to a vaccination against loss of purity.
- They expose the individual to pollution, but also offer protection against further corruption and loss of purity.
- Examples:
 - Becoming tough (e.g. how to fight, shoot a gun, or speak in a commanding tone).
 - Receiving sexual education.
 - Learning about how the world works (e.g. how to manage finances or choose a marriage partner).

Toughness

An investment in toughness rotates the purity function:



Toughness

Ideas of toughness are embedded in the concept of being "macho."

Macho, which literally means "male" in Spanish, is often defined as an exaggerated masculinity.

- ▶ Men in fulfillment families have less reason to be tough as purity is not a concern.
 - ► The Berkeley Men's Center fought against having "to live up to an impossible oppressive masculine image strong,...unemotional, successful, master of women."

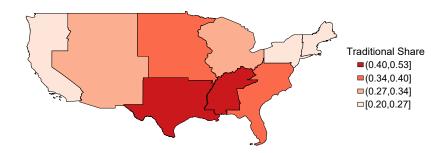
Authoritarianism

Parenting Styles

Dep Var: Authoritarian	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Inequality	1.787***	1.113	1.718***	1.208	1.718***	1.188**	1.845***	2.330***
	(0.316)	(0.104)	(0.313)	(0.269)	(0.304)	(0.104)	(0.313)	(0.543)
Traditional	2.527***	2.564***	2.489***	2.516***	2.323***	2.403***	2.150***	2.110***
	(0.141)	(0.121)	(0.153)	(0.125)	(0.123)	(0.111)	(0.15)	(0.141)
N	31,666	31,666	23,131	23,131	31,367	31,367	32,998	32,998
Country FE	NO	YES	NO	YES	NO	YES	NO	YES

The table performs the same exercise as Table 1 of Doepke and Zilibotti (2017) only with an additional regressor: whether the respondent is a traditional type. All columns are individual-level multinomial logistic regressions. Columns (1) and (2) are based on the whole sample; columns (3) and (4) restrict to parents; columns (5) and (6) control for religiosity; and columns (7) and (8) use alternative classifications of parenting styles. For full procedural details, see Doepke and Zilibotti (2017). Standard errors, reported in parentheses, are clustered at the country level. *** 0.01, ** 0.05, * 0.1.

Geographical Clustering of Narratives



Conclusion

- ▶ We have argued that augmenting the Becker model with stories significantly enhances its explanatory power.
- These stories produce distinctive bundles of behavior.
- ► They also give rise endogenously to various forces invoked to understand families and labor market outcomes.
- For example, we obtain:
 - A number of sexist behaviors without directly assuming sexism.
 - ▶ Behaviors attributable to "culture" (e.g. gender roles, patriarchies) without directly assuming cultural prescriptions.

Conclusion

- By necessity, our model remains incomplete. E.g. it excludes:
 - Fertility, age of child bearing, abortion.
 - Divorce, remarriage, use of dowries.
- And, there are other narratives, which may serve as complements or substitutes for the two we considered here.
- Finally, we've only scratched the surface in terms of testing the theory.

Thank You!

World Value Survey

Table 2: Classification Exercise (WVS)

	•	
	(1)	(2)
Variable	Modern	Traditional – Modern
	(average)	(average)
If jobs are scarce, men have more right: agree [†]	-0.480	0.783***
Being a housewife as fulfilling as paid work: agree strongly [†]	-0.117	0.188***
Prostitution: never justifiable [†]	-0.783	1.269***
Divorce: never justifiable [†]	-0.821	1.343***
Homosexuals as neighbors: would not like [†]	-0.631	1.030***
Sex before marriage: never justifiable	-0.728	1.202***
Homosexuality: never justifiable	-0.778	1.263***
Most people can be trusted: can't be too careful	-0.104	0.168***
Unmarried couples as neighbors: would not like	-0.313	0.543***
Woman as a single parent: disapprove	-0.381	0.613***
Obedience in children: important	-0.150	0.244***
Independence in children: important	0.115	-0.183***
Ever married [‡]	0.624	0.090***
How many children do you have [‡]	1.591	0.481***

WVS respondents are classified as modern or traditional using the k-means algorithm (see Online Supplement for further details). Questions used to cluster are marked with †. All variables without ‡ have been standard-ized. Response after the colon (:) corresponds to the largest numeric value of the variable. Standard errors are heteroskedasticity robust. *** 0.01, ** 0.05, * 0.1.

World Value Survey

Table A.1: Modern-Type Respondents by Country (Back)



Country	Share	Country	Share	Country	Share
Andorra	94.0%	Mexico	49.4%	Armenia	15.0%
Sweden	92.4%	Chile	47.3%	Turkey	14.5%
Netherlands	86.1%	Serbia	44.1%	India	14.4%
Switzerland	83.4%	Haiti	43.7%	Zimbabwe	11.7%
Norway	82.7%	Colombia	43.7%	Rwanda	10.9%
New Zealand	78.5%	Singapore	42.6%	Ghana	10.7%
Germany	78.1%	Puerto Rico	41.8%	Nigeria	10.4%
Australia	77.7%	Peru	40.4%	Libya	9.9%
United Kingdom	76.9%	South Africa	40.2%	Georgia	9.8%
France	74.4%	Taiwan	39.3%	Algeria	9.8%
Canada	74.1%	Poland	38.5%	Uzbekistan	9.3%
Spain	73.8%	Ecuador	38.4%	Indonesia	8.4%
Finland	73.7%	Zambia	35.7%	Zerbaijan	8.4%
Uruguay	73.1%	Venezuela	35.5%	Bangladesh	5.3%
Czech Rep.	67.0%	Ukraine	35.5%	Pakistan	4.1%
Slovenia	65.7%	Philippines	34.3%	Jordan	0.7%
United States	65.3%	Mali	33.9%	Egypt	0.2%

WVS respondents are classified as modern or traditional using the k-means algorithm (see Online Supplement for further details).