

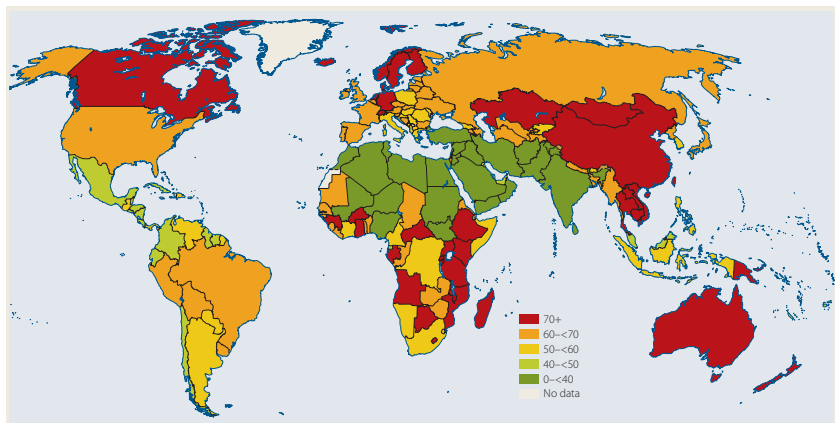
IDEAS UMass Boston, 2014

## Understanding Gender Norms

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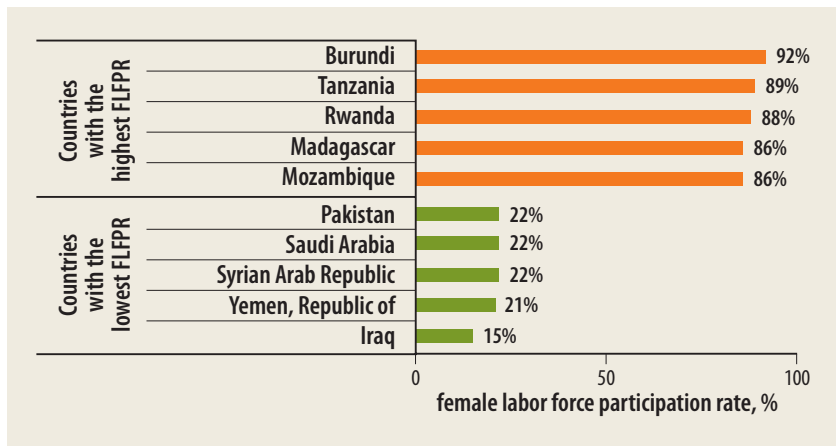
October 29, 2014

# The role of women around the world



Source: International Labor Organization (2010a).

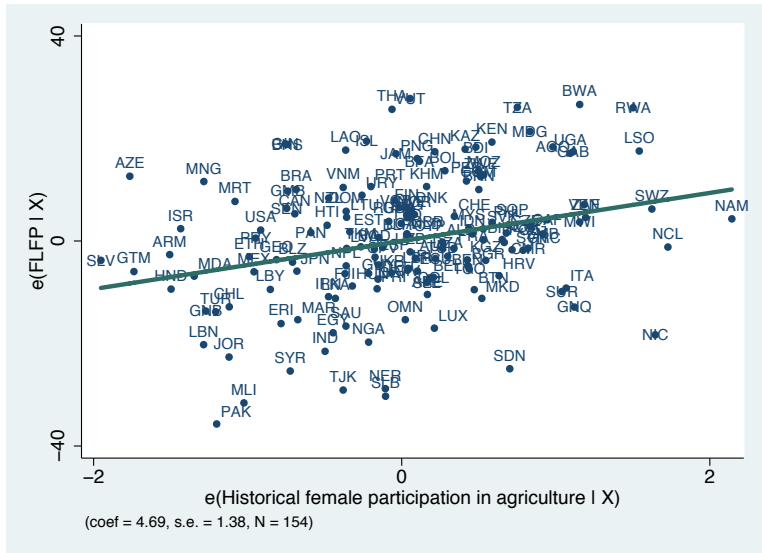
# The role of women around the world



## These differences are strongly correlated with values and beliefs

- ▶ “When jobs are scarce, men should have more right to a job than women” (from World Values Survey):
- ▶ Proportion of the population that answers ‘yes’:
  - ▶ Iceland 3.6%; Sweden 4.5%; Denmark 6.0%; Ethiopia 6.5%; Finland 10.7%; Norway 10.7%
  - ▶ Iran 78.5%; Pakistan 78.8%; Iraq 81.0% Jordan 88.9%; Saudi Arabia 89.7%; Egypt 94.9%

These differences are highly persistent



## But not that persistent: Gender norms at Çatalhöyük



# Gender norms at Çatalhöyük

- ▶ Based on archaeological evidence (Ian Hodder, 2005).
- ▶ Men and women had similar diets: evidence from bones and teeth.
- ▶ No clear gender specialization of labor: evidence from carbon deposits in ribs.
- ▶ Similar social status: based on burial sites (location & head removal).

# The question

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# The question

- ▶ **Where do these cultural differences come from?**
- ▶ Potential answers:
  1. Who knows. . . these differences cannot be explained.
  2. They are historically determined through an evolutionary process.

## Esther Boserup's hypothesis: The plough



# Plough agriculture



# Hoe agriculture



# Hoe agriculture



# Examining Boserup's hypothesis

- ▶ **Question 1: Is it true that historical adoption of the plough was associated with less female participation in agriculture?**



# Measuring the presence of plough agriculture

- ▶ The original information, from the *Ethnographic Atlas*, categorizes 1265 ethnic groups into the following four categories:
  1. Data missing (109)
  2. Plough absent (999)
  3. Plough exists but not aboriginal (18)
  4. Aboriginal plough use prior to contact (141)
- ▶ Using this, we construct a variable that equals one if an ethnic group engaged in plough agriculture.

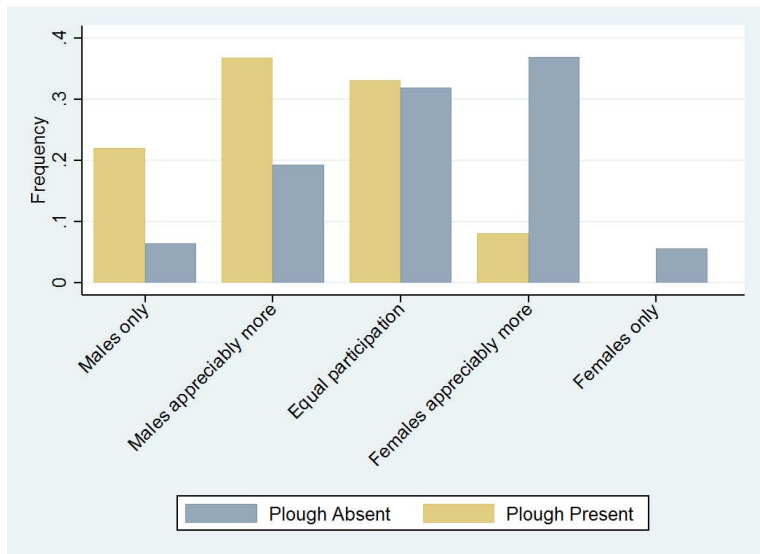
# Measuring historical female participation in agriculture

- ▶ Gender differences in agriculture (& other activities):
  1. Males only (70)
  2. Males appreciably more (161)
  3. Equal participation (230)
  4. Females appreciably more (227)
  5. Females only (32)
- ▶ We create a variable that takes on the values 1–5, and is increasing in female participation in agriculture.

**Table:** Was the plough associated with differences in the gender division of labor within agriculture?

	Dependent variable: Traditional participation of females in agriculture, 1-5
Mean of dep. var.	3.04
Traditional plough agriculture	-0.883*** (0.225)
Ethnographic controls	yes
Observations	660
R-squared	0.14

# Distribution of historical female participation in agriculture



# Examining Boserup's hypothesis

- ▶ **Question 2 (an aside): If women in plough societies worked less in agriculture, what did they do more of?**

**Table:** Was the plough associated with differences in the gender division of labor within agriculture?

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable: Traditional participation of females relative to males in the following tasks:						
	Overall agriculture	Land clearance	Soil preparation	Planting	Crop tending	Harvesting
Mean of dep. var.	2.83	1.45	2.15	2.86	3.16	3.23
Traditional plough agriculture	-1.136*** (0.240)	-0.434** (0.197)	-1.182*** (0.320)	-1.290*** (0.306)	-1.188*** (0.351)	-0.954*** (0.271)
Ethnographic controls	yes	yes	yes	yes	yes	yes
Observations	124	129	124	131	122	131
R-squared	0.23	0.18	0.14	0.13	0.18	0.20

**Table:** Was the plough associated with differences in the gender division of labor in other activities?

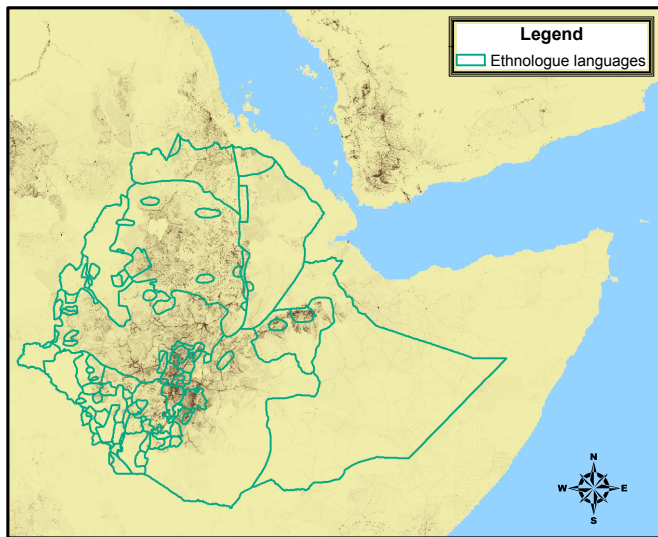
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dependent variable: Traditional participation of females relative to males in the following tasks:									
	Caring for small animals	Caring for large animals	Milking	Cooking	Fuel gathering	Water fetching	Burden carrying	Handicrafts	Trading
Mean of dep. var.	3.53	1.73	3.25	4.65	3.90	4.64	3.47	2.78	2.47
Traditional plough use	0.140 (0.517)	0.064 (0.254)	0.630 (0.697)	-0.019 (0.108)	-0.638 (0.403)	-0.052 (0.205)	-0.962** (0.378)	-0.157 (0.274)	-0.155 (0.542)
Ethnographic controls	yes	yes	yes	yes	yes	yes	yes	yes	yes
Observations	88	95	48	173	159	154	135	74	59
R-squared	0.05	0.04	0.14	0.04	0.04	0.04	0.16	0.15	0.10

# Examining Boserup's hypothesis

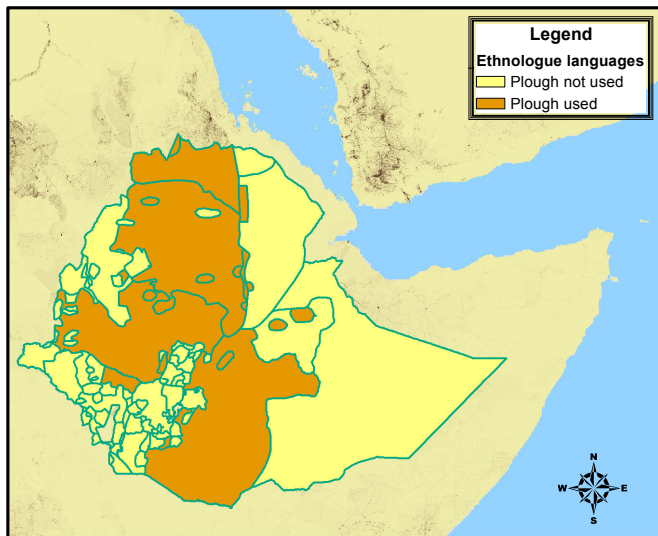
- ▶ **Question 3: Is ancestral plough use associated with less equal gender norms today?**



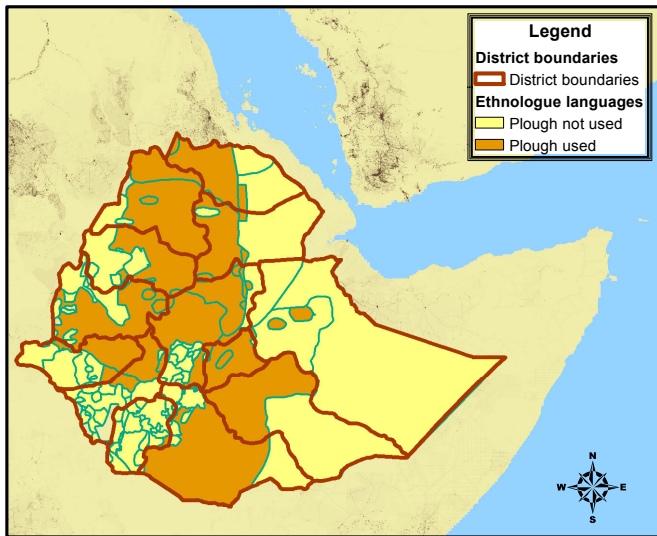
# Linking the past to the present



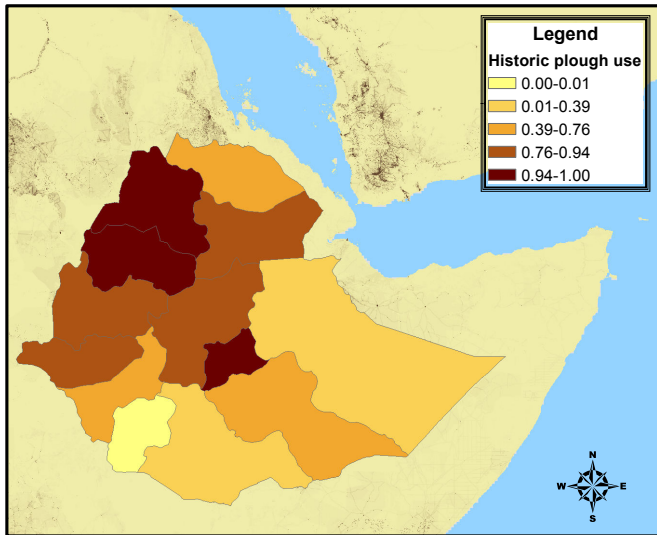
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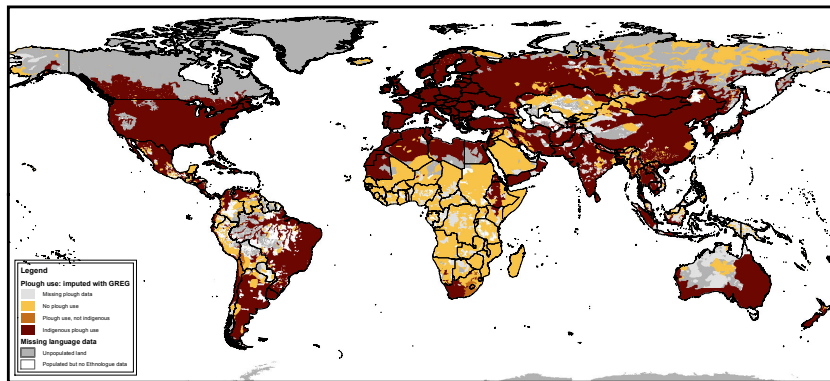
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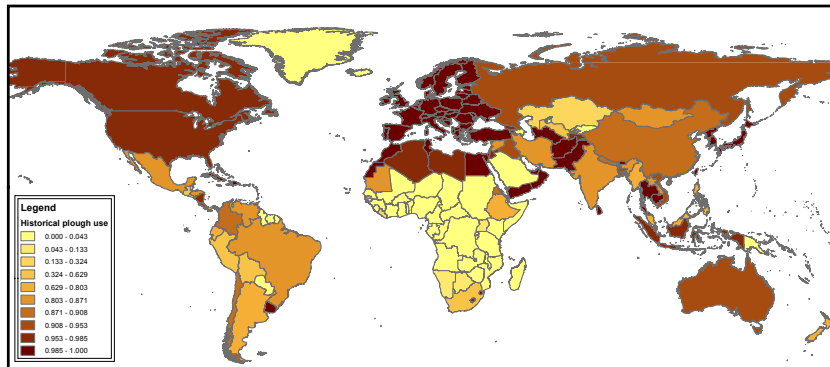
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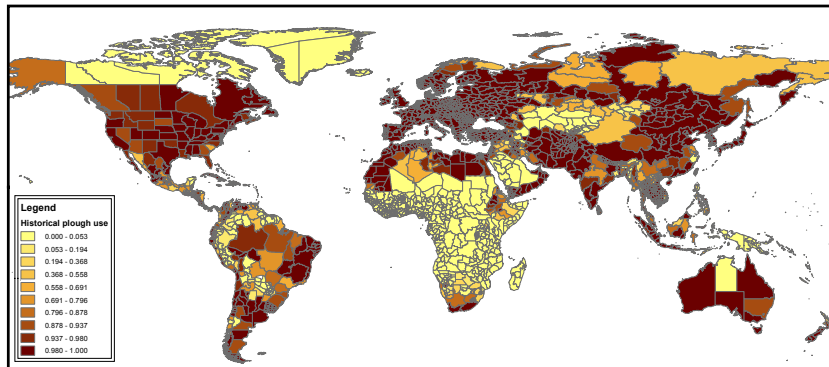
# Ancestral plough use across language groups



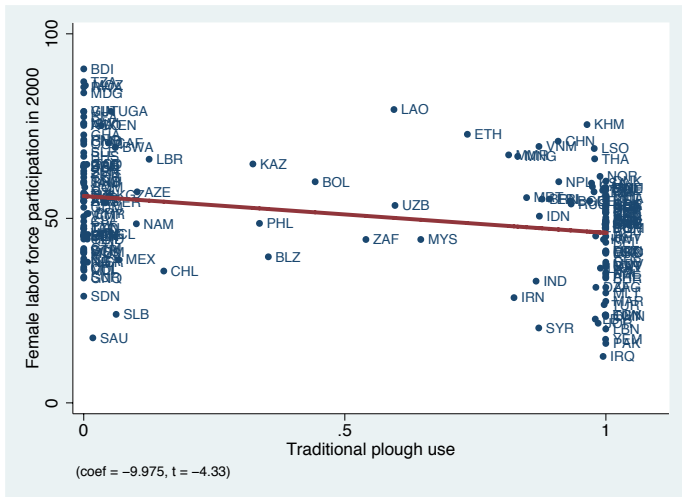
# Ancestral plough use across countries



# Ancestral plough use across districts

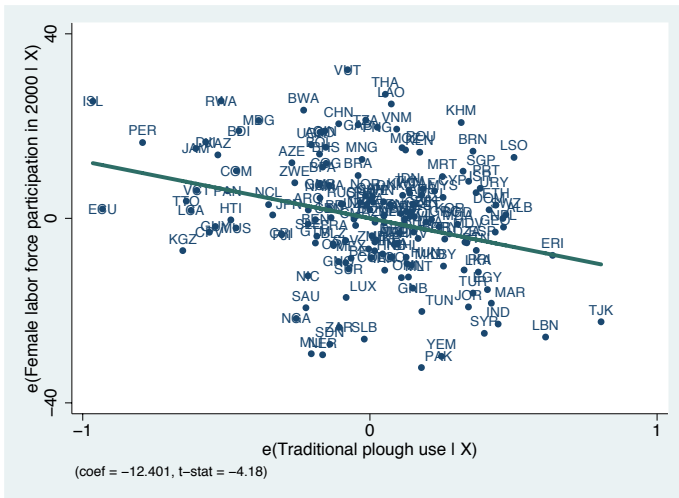


# Female labor force participation

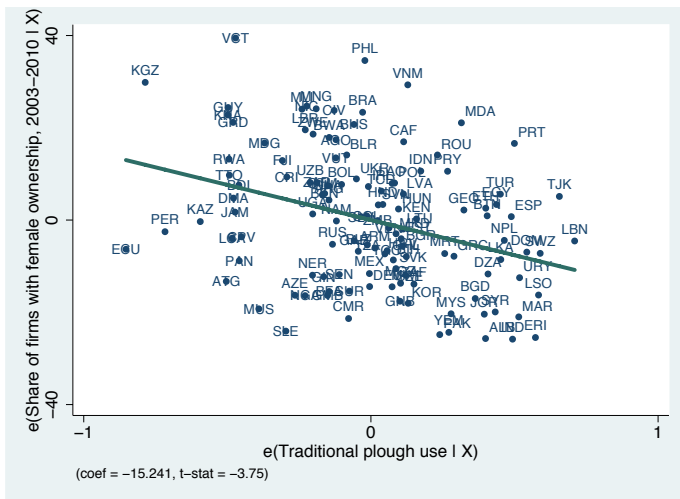




# Female labor force participation, accounting for covariates



# Share of firms with female ownership, accounting for covariates



# Share of national seats held by women, accounting for covariates



# Zooming in to the micro level

Results are similar when one looks at:

1. Variation across countries within continents.
2. Variation across districts within countries.
3. Variation across ethnic groups within countries.

# Examining Boserup's hypothesis

- ▶ **Question 4: Is this really about cultural norms?**

# How much of this is about values and attitudes?

- ▶ To help identify a purely cultural channel, we examine the children of immigrants born and raised within the United States or Europe.
- ▶ Benefit of this strategy:
  - ▶ Children of immigrants face the same domestic institutions, markets, and policies (since they are all in the same country), but have different cultural backgrounds.

# Children of migrants to Europe

	(1)	(2)	(3)
Dependent variable: "When jobs are scarce..." survey response, 1-5 scale			
	Father's country	Mother's country	Parents same country
Mean of dep. var.	2.54	2.53	2.62
Traditional plough use	0.219** (0.091)	0.214** (0.086)	0.298*** (0.096)
Observations	15,545	15,260	10,535
R-squared	0.18	0.17	0.17

## Children of migrants to the U.S.

	(1)	(2)	(3)
Dependent variable: Labor force participation indicator, 1994-2011			
	Father's country	Mother's country	Parents same country
Mean of dep. var.	0.63	0.63	0.60
Traditional plough use	-0.044*** (0.015)	-0.043** (0.018)	-0.062*** (0.020)
Observations	57,138	55,341	32,776
R-squared	0.23	0.23	0.26



## So, what have we learned?

- ▶ Differences in cultural gender norms are explained, in part, by the history of our ancestors.
- ▶ More generally, there is accumulating evidence that current values and beliefs have been shaped by history.