

85 Years of US Women's Time Use

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Outline of presentation

1. Background to 1925 *Purnell Act* studies
2. Data recovered (and unrecovered)
3. What we have done so far
4. How well we did!
5. What we found: a few 'taster' tables
6. Conclusions
7. Next steps

Background to study

- The *Morrill Land Grant College Act* of 1862 supported the establishment of US state colleges for agriculture and the *Hatch Act* (1887) the development of state agricultural experiment stations. The *Smith-Lever Act* (1914) created a Cooperative Extension Service associated with each US land-grant institution.
- The 1925 *Purnell Act*, with a focus on agricultural economics and rural sociology, enabled the US Department of Agriculture (USDA) to collect evidence of farm women's time use across a number of state agricultural experiment stations.
- Dr Hildegard Kneeland, a Home Economist employed by the US Bureau of Economics conducted diary surveys from 'farm', 'town' and 'college' women for comparative purposes. Her 1929 *Annals* article sets out a modern case for accounting extensions to recognise women's unpaid domestic work.
- These data are cited from the original USDA researcher-produced summary tabular results (Vanek 1974, 1978; Ramey 2009) but have not been re-coded and analysed. This is one of the tasks of the current study.

Cooperating State Experiment Station studies: Unrecovered raw data

- Anne Effland, a Social Science Analyst at the USDA, located some surviving records in the *US National Archives II* (Maryland) and brought these to the attention of the time use research community.
- Although findings from many studies are published in *Agricultural Experiment Station Bulletins*, the primary data are missing:
 - Nebraska (1919, 1924, 1926)
 - Idaho (1926)
 - Washington (1926)
 - South Dakota (1926)
 - Oregon (1926-1927)
 - Rhode Island (1926-1929)
 - South Carolina (1927-1929)
 - Montana (1929-1931)

Materials so far recovered

- Originally >1500 women 'farm' and 'town' were surveyed across the United States. The recovered material includes:
 - Researcher-produced diary-based weekly minutes summary tables in 60 activities, plus weekly help totals in various specific household tasks) for 566 'farm' women mainly from New York, California and Michigan States.
 - Seven-day own-words diaries, supplementary questionnaires (household composition and characteristics, appliances, equipment) and researcher-produced summary sheets for 77 'College' women (Kneeland's study).
- We have digitised all of the recovered records by scanning them and entering the data into a large database ready for quantitative analysis (SPSS, STATA).

Questions

- How do the *Purnell* studies relate to each other?
 - research design, sampling frames, instruments, coding frames, etc.
 - which samples do the diaries recovered to date come from: towns or farms?
- How can we uncover further information about the diary respondents and their households in the recovered materials?
- What does the 'College' women study represent? This was an elite sample recruited by Kneeland from the 'Seven Sisters' liberal arts women's colleges (Barnard, Bryn Mawr, Mount Holyoake, Radcliffe, Smith, Vassar & Wellesley).
- What can we learn from these data?

Example of USDA researcher-produced summary record (aggregates)

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF HOME ECONOMICS
WASHINGTON, D. C.

Page 1

SUMMARY OF WEEK'S TIME RECORD (NOT FOR PUBLICATION)

Name Goodchild, Barbara Address Route 1, Box 34-B, Santa Maria, Calif.

Date of record Jan. 26 - Feb. 1, 1938 Santa Barbara Co., California

TIME SPENT IN ALL ACTIVITIES BY HOMEMAKER

ACTIVITIES	TOTAL FOR WEEK		DAILY AVERAGE	
	Hrs.	Min.	Hrs.	Min.
WORK	78	05	11	09
Homemaking (For details see page 2)	72	55	10	25
Farm work	5	10		44
Gardening and fruit growing				
Poultry	1	45		16
Dairy work		20		
Livestock				
Field crops				
Farm management				
Other farm work	3	05		
Going and returning				
Other work				
CARE OF SELF	71	45	10	15
Sleep and rest—night	54	30	7	47
day				
Eating—breakfast	2	25		21
dinner	4	30		39
supper or lunch	5	35		43
other				
Care of person	4			34
Other care of self		30		
Going and returning		15		
LEISURE	17	40	2	32
Reading		35		
Meetings and study				
Work for organizations				
Care of persons not members of household		35		
Liaison over radio				
Informal social life	13			
Social affairs and entertainments	2			
Outings and sport				
Other leisure		20		
Going and returning	1	10		
OTHER		30		04
TOTAL TIME	169		24	

U. S. GOVERNMENT PRINTING OFFICE: 1935

Page 2

SUMMARY OF WEEK'S TIME RECORD

Name Goodchild, Barbara Address Route 1, Box 34-B, Santa Maria, Calif.

TIME SPENT IN HOMEMAKING ACTIVITIES BY HOMEMAKER AND HELP

ACTIVITIES	TOTAL FOR WEEK						DAILY AVERAGE					
	HOMEMAKER		HELP		HOMEMAKER AND HELP		HOMEMAKER		HOMEMAKER AND HELP			
	Hrs.	Min.	Hrs.	Min.	Hrs.	Min.	Hrs.	Min.	Hrs.	Min.		
FOOD	32	25	1		33	25	4	38	4	46		
Preparing meals	20	10	1		21	10	2	53	3	01		
Breakfast	4	55	1		5	55		42		51		
Dinner	7				7		1		1			
Supper or lunch	7	10			7	10	1	02	1	01		
Other	1	05			1	05		09		09		
Cleaning away meals	12	15			12	15	1	45	1	45		
Breakfast	4	25			4	25		38		38		
Dinner	3	05			3	05		26		26		
Supper or lunch	4	45			4	45		41		41		
Other food												
HOUSE	12	50	2		14	50						
Cleaning and straightening	7	35			7	35	1	05	1	05		
Care of fires	3	35	2		5	35						
Care of water supply												
Making, installing, repairing												
Care of house surroundings	1	40			1	40						
Other house												
CLOTHING AND TEXTILES	10	45			10	45						
Laundoring	5				5							
Regular washing	3	20			3	20						
Regular ironing	2	40			2	40						
Extra laundoring												
Laundry sent out												
Mending		30				30						
Sewing and fancy work	4	10			4	10						
Other clothing and textiles		05				05						
CARE OF MEMBERS OF HOUSEHOLD	7	35			7	35	1	05	1	05		
HOMEMAKING MANAGEMENT	7	20	1	10	8	30						
Food purchasing	2	15	1	10	3	25						
Other purchasing		55				55						
Planning and recording	4	10			4	10						
Other management												
OTHER HOMEMAKING		45				45						
GOING AND RETURNING	1	15	2	20	3	35						
TOTAL HOMEMAKING	72	55	6	30	79	25						

U. S. GOVERNMENT PRINTING OFFICE: 1935

Methods for identifying 'farm' women's individual and household characteristics

- Family and given names/initials and address were attached to the 566 USDA researcher-prepared aggregate summaries.
- These were matched to records in 'Ancestry.com' including:
 - US Federal Census micro-data to 1940 (70-year embargo in US)
 - Birth, Death & Marriage Indexes
 - Voting Registers (mainly Californian)
 - Social Security Numbers
 - City Directories
 - Military records (including drafts)
 - Immigration & travel documents (passport applications, etc.)
 - Other material (obituaries, newspaper articles, photographs, etc.)

USDA activity codes (1924–1929)

WORK

- Homemaking
- Farm work (Gardening and fruit growing, Poultry, Dairy work, Livestock, Field crops, Farm management, Other farm work, Going and returning)
- Other work

CARE OF SELF

- Sleep and rest (Night, Day)
- Eating (breakfast, dinner, supper or lunch, other)
- Care of person
- Other care of self
- Going and returning

LEISURE

- Reading
- Meetings and study
- Work for organizations
- Care of persons not members of household
- Listening over radio
- Informal social life
- Social affairs and entertainments
- Outings and sport
- Other leisure
- Going and returning

OTHER

FOOD

- Preparing meals (Breakfast, Dinner, Supper or lunch, Other)
- Clearing away meals (Breakfast, Dinner, Supper or lunch, Other)
- Other food

HOUSE

- Cleaning and straightening
- Care of fires
- Making, installing, repairing
- Care of house surroundings
- Other house

CLOTHING AND TEXTILES

- Laundering (Regular washing, Regular ironing, Extra laundering, Laundry sent out)
- Mending
- Sewing and fancy work
- Other clothing and textiles

CARE OF MEMBERS OF HOUSEHOLD

HOMEMAKING MANAGEMENT

- Food purchasing
- Other purchasing
- Planning and recording
- Other management

OTHER HOMEMAKING

GOING AND RETURNING

Example of 7-day own-words diary (1930)

United States Department of Agriculture
Bureau of Home Economics
Washington, D. C.

DAILY TIME RECORD OF HOMEMAKER

Name Mrs. Edward H. Daman
Address Skellytown
Texas
Day of week Saturday
Date April 26, 1930

649 NUMBER OF PERSONS

	Lodging	At meals (including lunches put up)		
		Break-fast	Dinner	Lunch or supper
Family	2	2	2	2
Guests				
Boarders and roomers				
Household help				
Farm help				
TOTAL	2	2	2	2

TIME RECORD FROM MIDNIGHT TO MIDNIGHT


Description of activities	Time of stopping	Time spent Hrs Min	Description of activities	Time of stopping	Time spent Hrs Min
Slept	7:35	7 35	Prepared dinner	6:40	10
Dressed	7:50	15	Ate dinner	7:10	30
Went to town	7:55	5	Went to city	7:45	35
Bought bread, etc	8:00	5	Bought groceries	8:05	20
Returned home	8:05	5	Went to movie	9:50	1 45
Prepared husband's lunch	8:30	25	Returned home	10:20	30
Prepared breakfast	8:50	20	Prepared iced drink	10:30	10
Ate breakfast	9:10	20	Washed dinner dishes	10:40	10
Washed dishes	9:20	10	Got ready for bed	11:00	20
Took down and washed light globes	9:45	25	Slept	12:00+	1
Made beds (changed sheets)	10:15	30			
Checked house accounts	10:25	10			
Dusted and swept house	12:20	1 55			
Read newspaper	12:30	10			
Prepared laundry	12:50	20			
Put pajamas to soak	12:55	5			
Prepared lunch	1:15	20			
Ate lunch	1:30	15			
Washed dishes	1:35	5			
Washed out pajamas	1:45	10			
Went for mail	1:50	5			
Returned home	1:55	5			
Read mail	2:15	20			
Read news magazine	3:20	1 05			
Sewed	4:20	1			
Friend called	5:20	1			
Prepared tea	5:30	10			
Cleared away and washed tea things	5:45	15			
Prepared vegetables	5:55	10			
Sewed	6:30	35			

86 (6-1-26)

1930 US Federal Census variables

- **ADDRESS** (name of the street, avenue, or road; house number)
- **OCCUPANT** (name of each person and their relationship to head of family)
- **RESIDENCE** (whether home is owned or rented; value of home; whether home is farm residence; whether home has a radio)
- **PERSONAL** (sex, race, age, marital status, college attendance, ability to read and write, birthplace, and birthplace of parents)
- **CITIZENSHIP** (language spoken before coming to the United States; year of immigration; whether naturalized or alien; ability to speak English)
- **OCCUPATION** (trade or profession; industry or business working in; class of worker; whether worked the previous day; line number of unemployment schedule)
- **MILITARY** (whether veteran or not; war or expedition participated in)

State: _____ Enumeration District: _____
 County: _____ Sheet Number: _____
 City, township: _____ Call Number/URL: _____ Enumeration Date: _____

ancestry.com

State California Incorporated place _____
County Stanislaus Ward of city _____ Block No. _____

DEPARTMENT OF COMMERCE-BUREAU OF THE CENSUS
FIFTEENTH CENSUS OF THE UNITED STATES: 1930
POPULATION SCHEDULE

Enumeration District No. 50-4
Supervisor's District No. 9

Sheet No.
7 B

Township or other division of county Ceres township

Unincorporated place _____

Institution _____

Enumerated by me on April 12, 1930 Myrtle M. Pfann, Enumerator.

PLACE OF ABODE	NAME	RELATIONSHIP	HOME DATA	PERSONAL DESCRIPTION	EDUCATION	PLACE OF BIRTH			MOTHER TONGUE OR NATIVE LANGUAGE OF FOREIGN BORN	CITIZENSHIP, ETC.	OCCUPATION AND INDUSTRY		EMPLOYMENT	VETERANS
						PERSON	FATHER	MOTHER			OCCUPATION	INDUSTRY		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
51	170	Marie	Wife - H			California	Agua Caliente	California						
52		Stanley	Son			California	California	California						
53	171	Leich, William	Head	O	R	W	6	30	Na	W	1880	Na	W	12
54		Wes	Wife - H		X	F	W	50	Na	W				
55	172	Gipsier, Arthur & A	Head	O		W	50	Na	W	1880	Na	W	12	
56		Amanda	Wife		X	F	W	51	Na	W	1880	Na	W	
57		Donald	Daughter		X	F	W	22	Na	W				
58		Walter	Son		X	M	W	18	Na	W				
59		Norman	Son		X	M	W	16	Na	W				
60		Francis	Daughter		X	F	W	15	Na	W				
61		Henry	Son		X	M	W	10	Na	W				
62		Allan	Son		X	M	W	9	Na	W				
63	173	Leitch, Osa	Head	O	R	W	W	59	Na	W	1880	Na	W	12
64		Mary E	Wife - H		X	F	W	62	Na	W				
65		Woodard, Anna E	Son - H		X	F	W	64	Na	W				
66	174	Boothe, D. Power	Head	O	R	W	W	48	Na	W	1880	Na	W	12
67		Margaret	Wife - H		X	F	W	42	Na	W				
68		J. P. P. P.	Son		X	M	W	19	Na	W				
69		Joni	Son		X	M	W	15	Na	W				
70		Jennie	Son		X	M	W	7	Na	W				
71		Margaret	Daughter		X	F	W	7	Na	W				
72	175	Anita	Head	R	W	W	31	Na	W	1880	Na	W	12	
73		Louise	Wife - H		X	F	W	27	Na	W				
74		Babara	Daughter		X	F	W	2	Na	W				
75		Marion	Daughter		X	F	W	3	Na	W				
76	176	Wanner, Elmo	Head	R	W	W	W	42	Na	W	1880	Na	W	12
77	177	Ross, Willie	Head	R	R	W	W	54	Na	W	1880	Na	W	12
78		Missouri	Wife - H		X	F	W	63	Na	W				
79	178	Raynor, Edgar A	Head	O	R	W	W	45	Na	W	1880	Na	W	12
80		Edw. M.	Wife - H		X	F	W	44	Na	W				
81		Ruth	Daughter		X	F	W	13	Na	W				
82		Robert	Son		X	M	W	11	Na	W				
83		Quentin	Son		X	M	W	7	Na	W				
84	179	Summa, Marston	Head	O	R	W	W	31	Na	W	1880	Na	W	12
85		Laura E	Wife		X	F	W	26	Na	W				
86		Flora E	Daughter		X	F	W	9	Na	W				
87		Marston S	Son		X	M	W	5	Na	W				
88	180	Summa, Robert S	Head	O	R	W	W	32	Na	W	1880	Na	W	12
89		Lillie	Wife		X	F	W	52	Na	W				
90		Opal	Daughter		X	F	W	17	Na	W				
91	181	Edw. M.	Head	O	R	W	W	79	Na	W	1880	Na	W	12
92		Elizabeth	Wife - H		X	F	W	64	Na	W				
93	182	Brady, Albert	Head	O	R	W	W	30	Na	W	1880	Na	W	12
94		Wes	Wife		X	F	W	28	Na	W				
95		Quinn	Son		X	M	W	28	Na	W				
96	183	Barkow, Ed	Head	O	R	W	W	68	Na	W	1880	Na	W	12
97		Gertrude	Daughter		X	F	W	30	Na	W				
98		John	Son		X	M	W	16	Na	W				
99		Wes	Son		X	M	W	20	Na	W				
100		Wes	Daughter		X	F	W	18	Na	W				

Census database variables (current project)

- For diarist and husband data from two censuses (mainly 1920 & 1930).
- 'Farm' & 'town' women's family characteristics derived from household census record (husband head of household in 1920 census).
- 94% of aggregate records matched to census records.

Census Roll and Enumeration District	Children living in household (name/age/sex)
Address at Censuses and USDA Survey	Other household members (parents/step-children/other family/servants/lodgers)
Rent/own/live in parents' or relatives' home/other	Place of birth (diarist, husband and parents)
Live on farm?	Race/immigrant/dates of immigration/naturalised?/mother tongue
Own radio? (1930 census)	War veteran (WW1/Spanish American War)
Occupation & industry	Birth & Death Index
Employed at Census?	Maiden name of diarist
Attended College at Census?	Remarks

Farm or town households?

HUSBAND'S OCCUPATION (From census nearest to date of diary)		
	N	%
Managerial, professional	30	5.7
Health, education, social care	3	0.6
Clerical, office support	10	1.9
Security/armed force	1	0.2
Sales, services, arts	40	7.5
Construction, manufacturing, etc.	38	7.2
Farm, forestry, worker	337	63.5
Non-farm, not yet classified	72	13.6
TOTAL	531	100

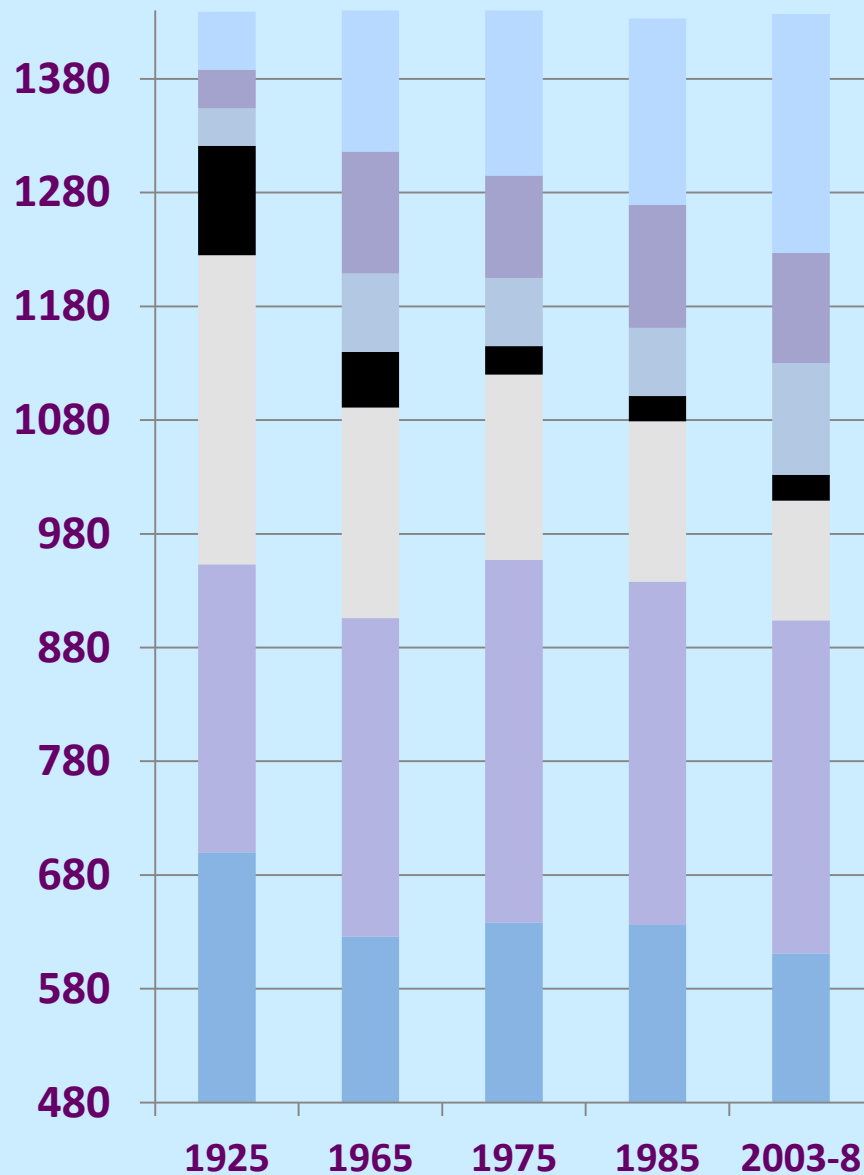
Farm or town?

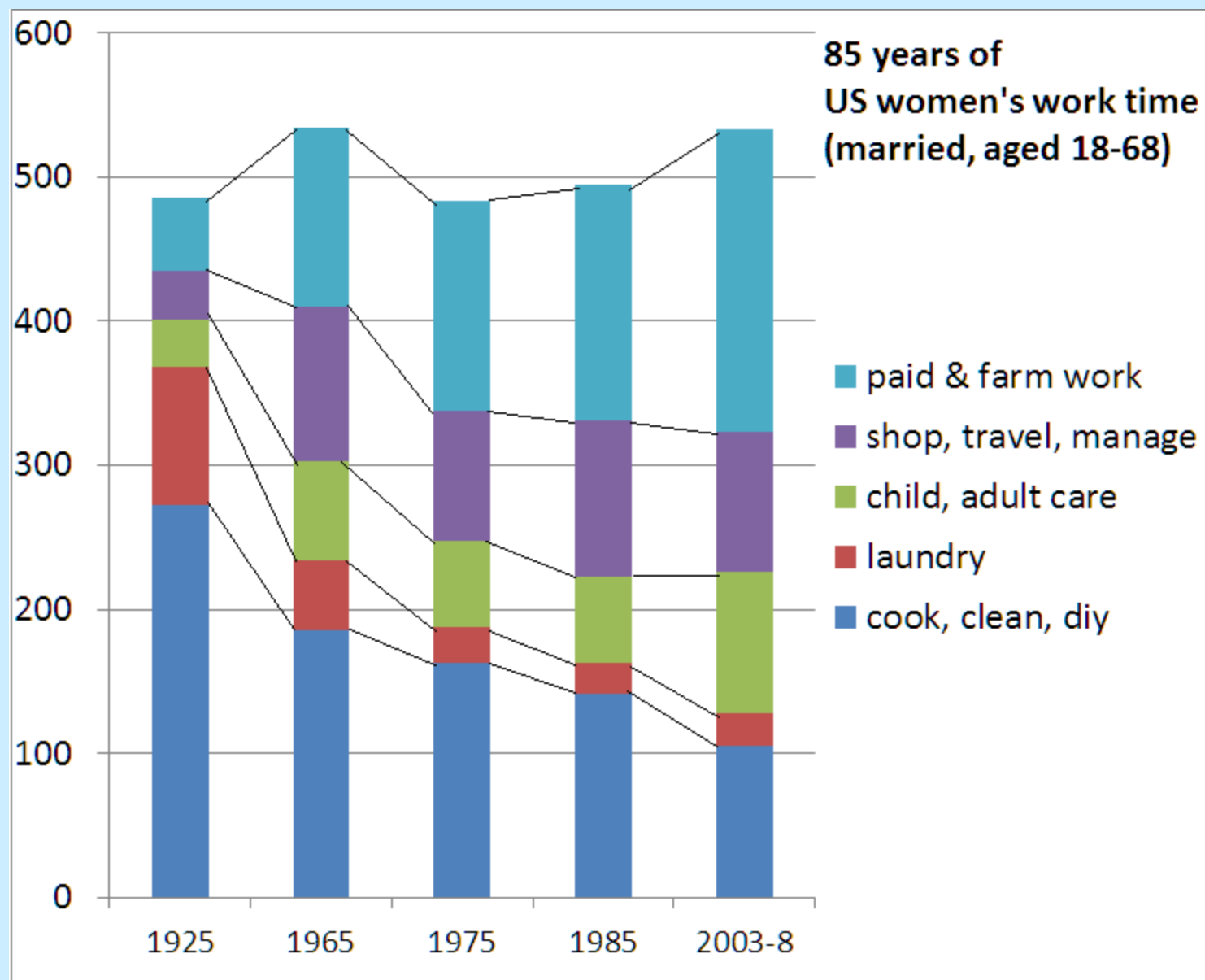
	HUSBAND'S OCCUPATIONS AT CENSUS			
	Farmer in neither census	Farmer in one census	Farmer in two censuses	TOTAL
ADDRESS TYPE				
Not recorded		1		1
Not on farm	111	53	10	174
Lives on farm	35	150	170	355
TOTAL	146	204	180	530

Age and family size

AGE GROUP BY CHILD STATUS			(column percentages)			
Age group	No child	One child	2+ children none <5	2+ children incl. <5	N	%
18-29	21.6	43.2	6.8	28.4	74	15.0
30-34	12.0	24.1	24.1	39.8	83	16.8
35-39	14.4	18.3	45.2	22.1	104	21.1
40-44	24.4	18.6	47.7	9.3	86	17.4
45-49	43.1	30.8	24.6	1.5	65	13.2
50-68	78.0	15.9	6.1		82	16.6
N	154	120	134	86	494	
%	31.2	24.3	27.1	17.4	100	

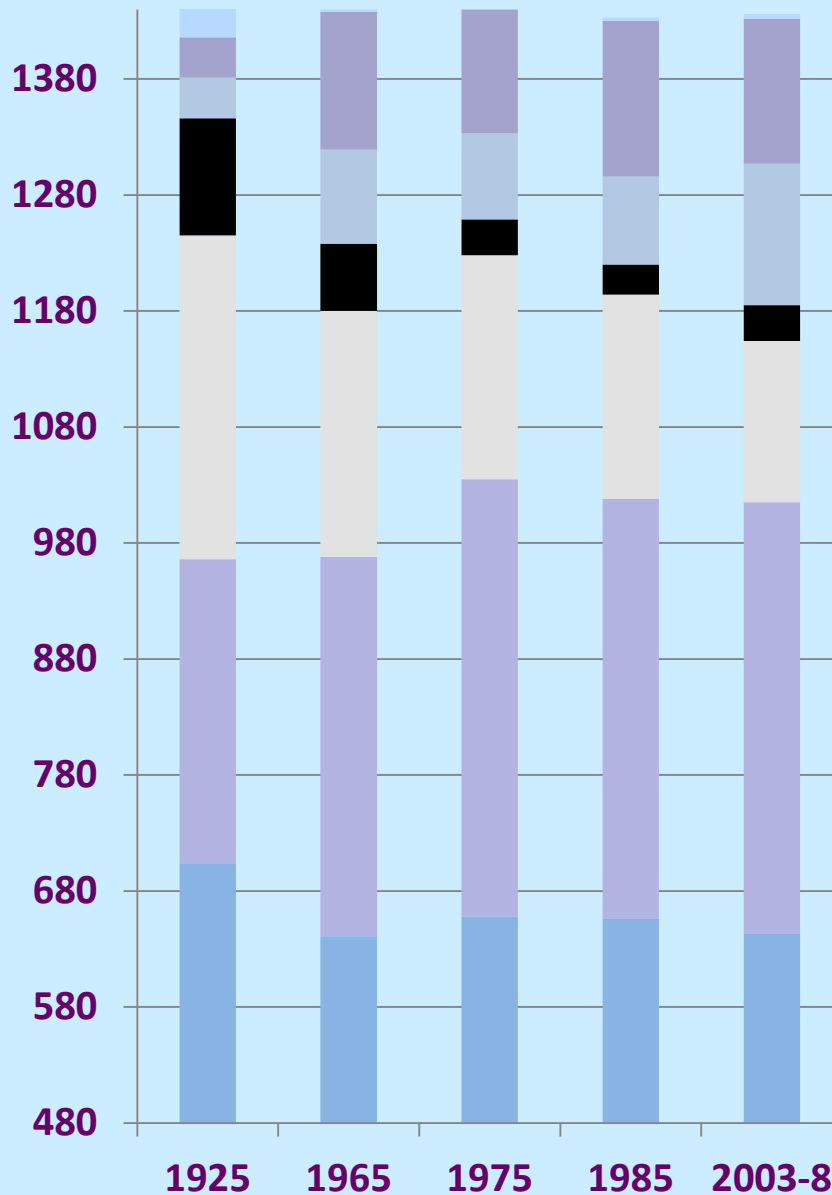
85 YEARS OF US WOMEN'S DAILY TIME USE (MARRIED, AGED 18-68)

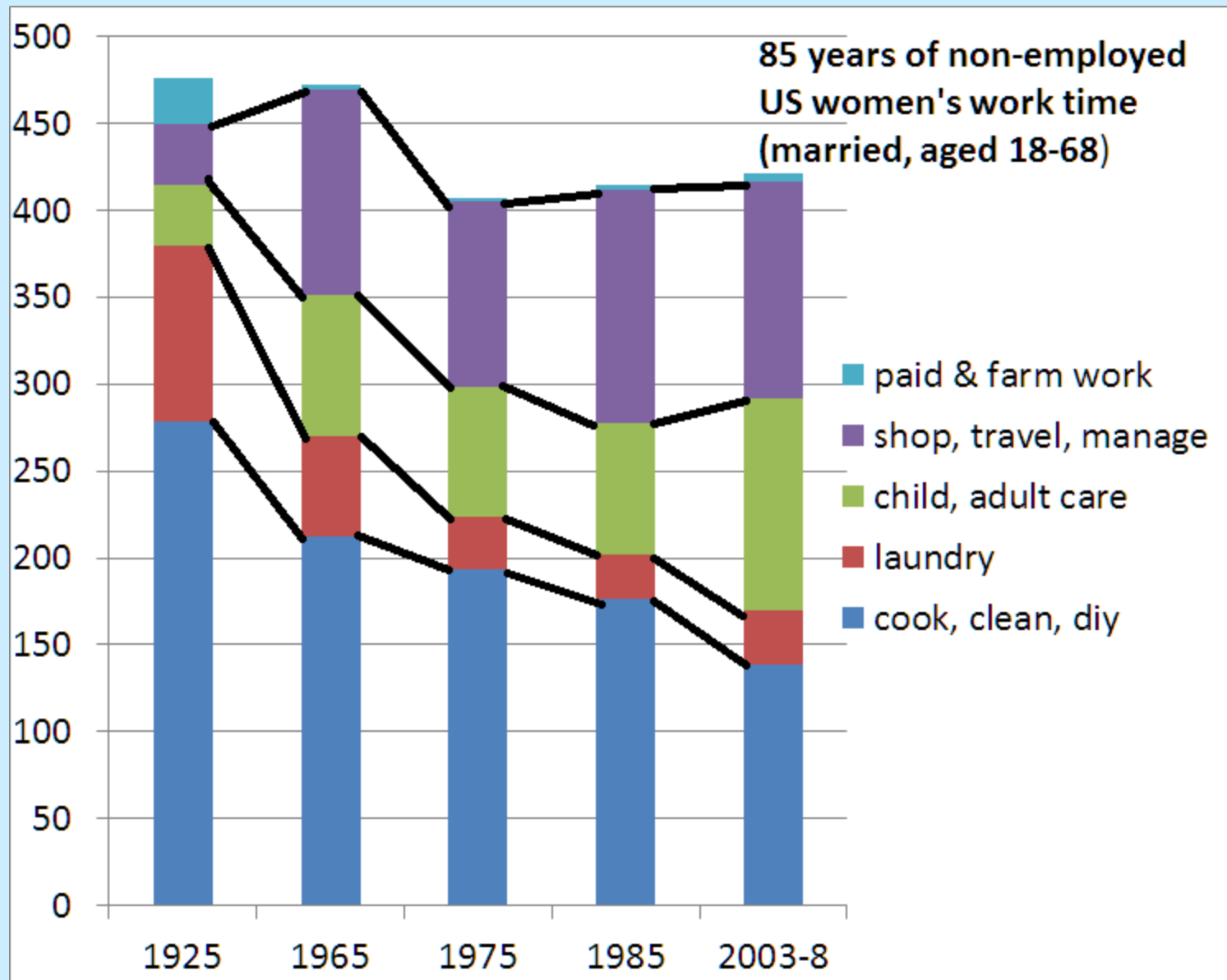




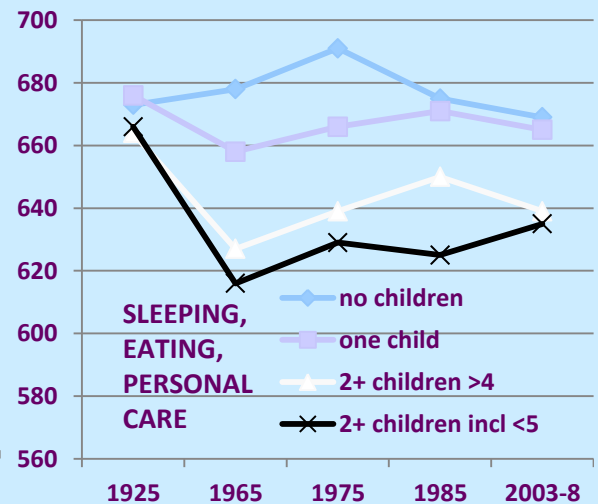
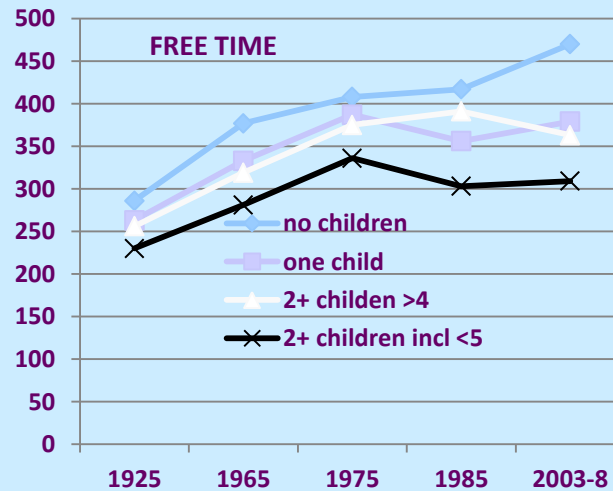
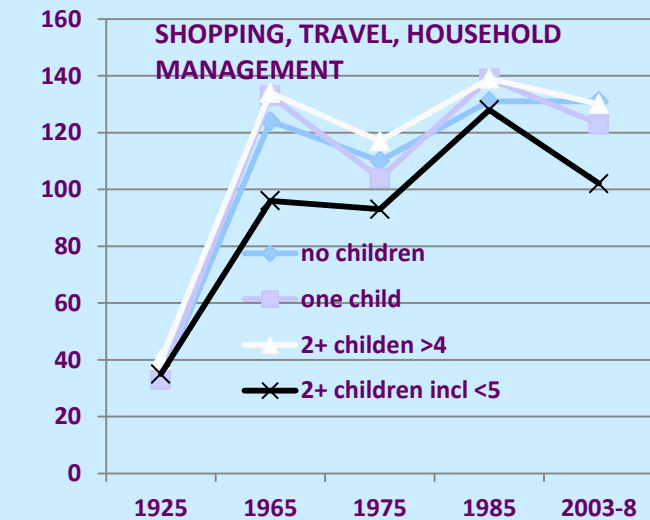
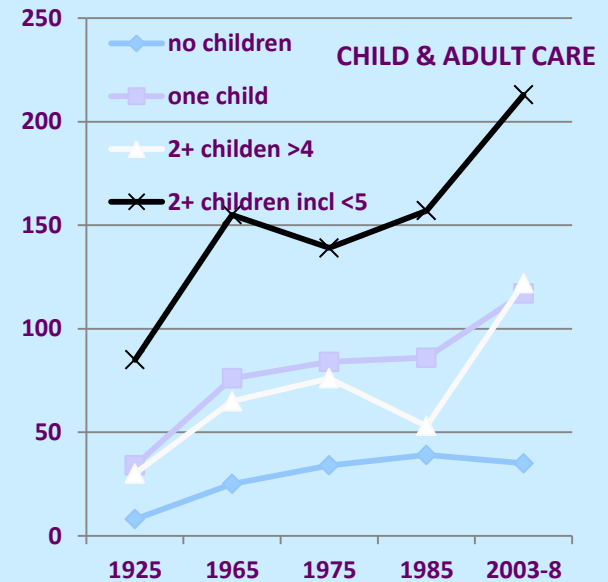
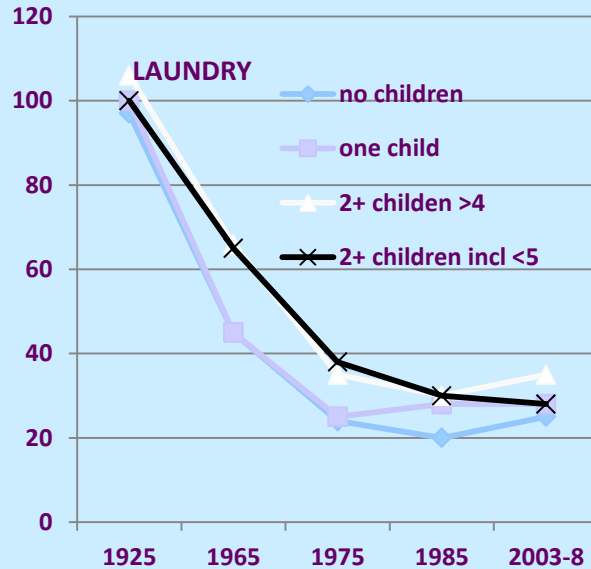
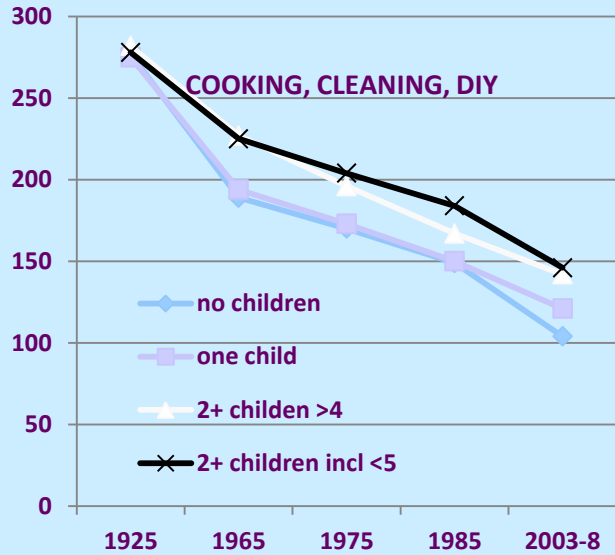
85 YEARS OF NON-EMPLOYED US WOMEN'S DAILY TIME USE (MARRIED, AGED 18-68)

Minutes per day





US women, married <90 minutes/day of farm or paid work



Next steps

- Re-weight 'farm' and 'town' women respondents to reproduce 1930s age census age distributions.
- Code 'College' women's own-words diary records to AHTUS/HETUS codes and compare to researcher-produced aggregates.
- Search for more *Purnell Study* and associated USDA data (refer to slide 4).
- Work on similar/comparative material (e.g. 1930s UK 'Mass Observation' diaries).

Conclusions

- This project takes the women's half of the US time diary evidence back another 40 years from current data, including women's work trends:
 - Declining cooking, cleaning, laundry time
 - Increasing, child/elder care, shopping time
- *Contradicts* previous assertions about consequences of household technology (e.g. Bittman *et al.* 2004; Cowan 1983; Vanek 1974).
- *Is consistent with* more recent international (developed country) trends from MTUS.

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