



Dismantling the Barriers

for Women in Computing Internationally



Australia	Annemieke Craig
Austria	Margit Pohl
Germany	Veronika Oechtering
India	M. Suriya
Pakistan	Jehan Ara
South Africa	Vashti Galpin
Turkey	Reyyan Ayfer
United Kingdom	Ursula Martin
United States of America	Tracy Camp

Moderator: Tracy Camp



Dismantling the Barriers

- ★ Background
- ★ Presentations from around the world
- ★ Discussion



Alice is not in this land

- ★ The land of computing is a frontier country, and, as in the development of most frontier territories, there are more men than women.
- ★ Indeed, it appears that at all levels of learning about computers - in school, in higher education, in further education, in training, in adult education classes, and in independent learning
- women tend to be strikingly under-represented

(Gerver 1989 p483)

Background - Education

	Pop'n (mill)	School	Age	University % Women	Literacy
Australia	20	7/6	15	57%	100%
Austria	8	4/4/4	15	52%	98%
Germany	83	4/6/3	15	50%	95%
India	1030	5/7	14	37%	<i>total 65%; M: 75% F: 52%</i>
Pakistan	150	6/4/2	10	50%	total 46% M: 60% F: 31%
South Africa	45	7/5	15	52%	<i>total 86% M: 87% F: 86%</i>
Turkey	68	8/3	14	41%	<i>total 87% M: 94% F: 78%</i>
UK	57	7/5	16	50%	99%
USA	293	4/4/4			97%

Background - Society

	% of Workforce	% of Parliamentarians	Right to Vote
Australia	45%	26%	1902
Austria		25%	1918
Germany	46%	31%	1918
India	38%	9%	1950
Pakistan		33%	1947
South Africa	42%	30%	1930 (whites) 1994 (blacks)
Turkey	35%	4%	1930
UK	45%	17%	1918
USA	47%	14%	1920



Background - Workforce

	Where they are	Where they are not
Australia	Health/education/sales/clerks	Engineering/ Senior management/ construction
Austria	Health/ social work/ trade	Researcher + development
Germany	Nurses/Secretarial/teachers	Construction/senior positions
India	Agriculture/domestic workers	construction
Pakistan	Healthcare/ education/ secretarial	Engineering / architecture/ scientists/ defence
South Africa	Nurses/ teachers/ clerks/ domestic workers	Legislators/ senior officials and managers
Turkey	Nurses/ teachers/ Pharmacists/ programmers	Engineering
UK	Secretary/Nurses/Cooks/domestic	Engineering/ Senior positions
USA	Social services/ education/ health/ domestic	Engineering/ construction/ automotive

Background - Computing

	% IT Professionals	% Studying IT
Australia	24%	23%
Austria	27%	15%
Germany	20%	15%
India	21%	47%
Pakistan		30%
South Africa	27%	32%
Turkey		21%
UK	20%	20% U/G 26% P/G
USA		28% U/G



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Reflections

- ★ Gender and IT - The inequality does matter.
- ★ A complex array of issues contribute to the problem.
- ★ There are a variety of strategies for change.
- ★ There is no quick and easy solution.
- ★ We need to continue to chip away at the barriers
- ★ We need to make a difference

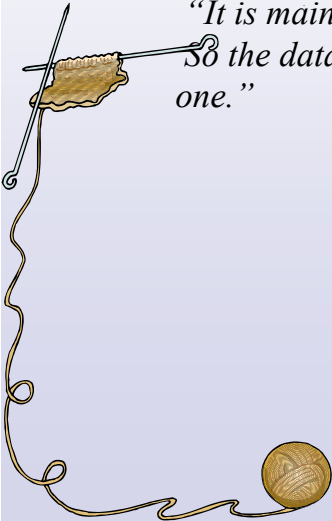
Relative Complexity

*In my parents' lounge room after Christmas dinner
I am talking to my brother the computer programmer.
He is explaining to me the principles of cyberspace.*

*"It is only relatively complex," he says finally, peeling the icing off his
fruitcake,*

"It is mainly a system of binaries, permutations of zero and one.

*So the data may be stored as, say, zero, zero, one, one, one, zero, zero,
one."*



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one."*

My mother sighs.

She is next to us, half-listening.

She is knitting a fair-isle sweater.

"I'll never understand how you get your brain around it," she says.

"It's beyond me" she says, and turns half her attention back

to her fair-isle pattern: Purl purl plain, plain plain plain purl purl.

