
Women in Free Software

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What is Free Software? How are Free Software Communities?



Definitions

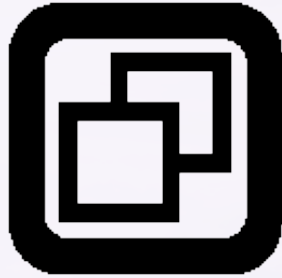
Free Software / Open Source



Freedom 0: Use the program and the results of its execution for whatever purpose, without restriction



Freedom 1: Study the program, learn from it, and be allowed to use the acquired knowledge



Freedom 2: Copy, share and distribute the program, both in its totality or just a part of it

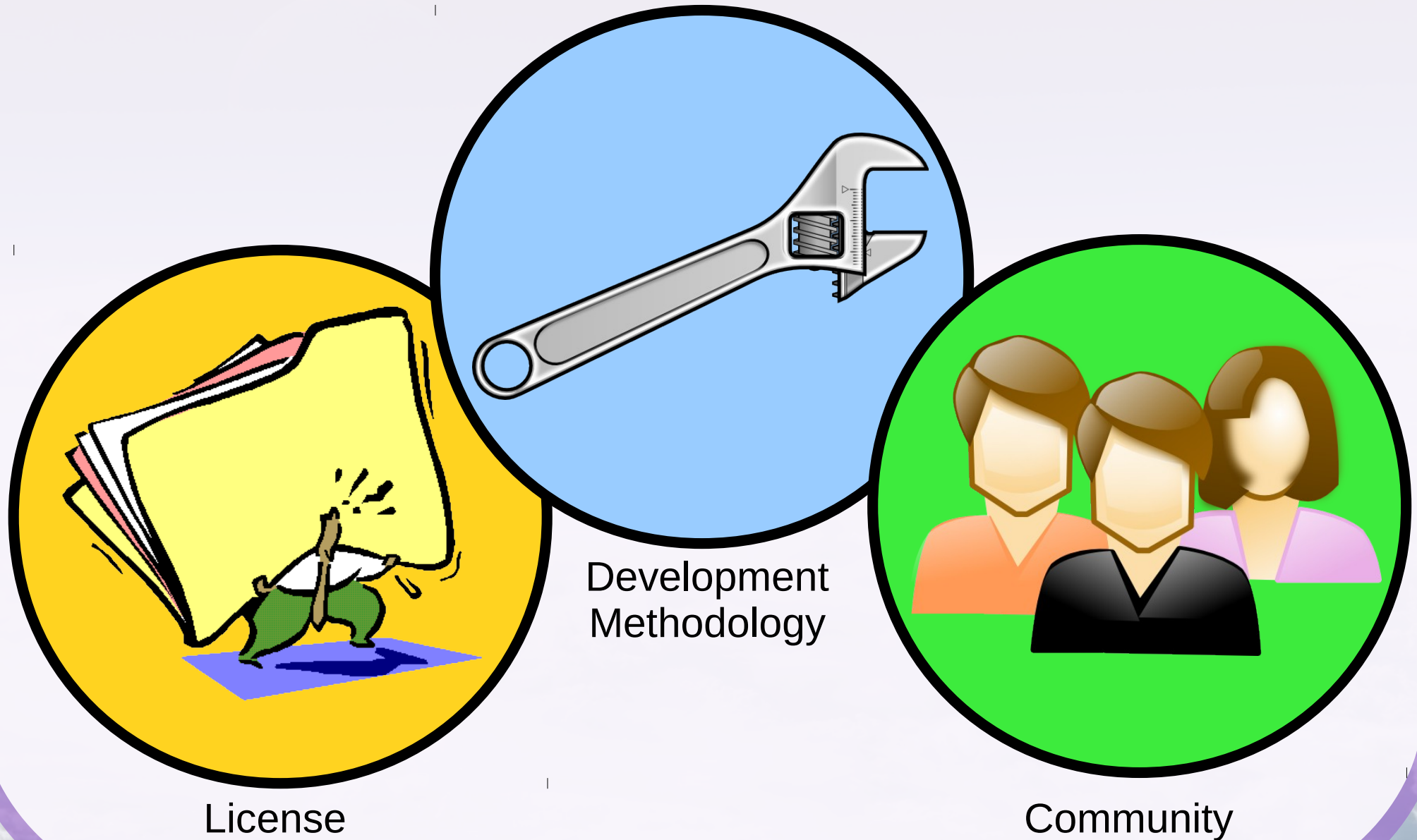


Freedom 3: Modify and improve the program, and publish the changes that have been made

What are the Commons?

- The Commons refer to **resources that are collectively owned** or shared and that **no individual person has exclusive control of, nor exclusive usage rights**
- Internet has given strength to social identities and non-economic interests of the people, making them a very influential force in information networks
- Internet itself is based on several layers of open innovation, which are indeed a technological commons
- Several legal developments, such as **Creative Commons** licenses, **also help to promote collaboration and the sharing of ideas and culture**
- The **Nobel Prize in Economics 2009** was awarded to the political scientist Elinor Ostrom *"for her analysis of economic governance, especially the commons"*

From the license to the Community



Who is the Community?

**Big
Corporations**

**Governments
and Public
Administrations**

**Associations
and
Foundations**

**SMEs, Knowledge
Workers, Self-
Employed People**

**Non-
Governmental
Organizations**

**Universities,
Colleges,
Schools**

**Social
Activists**

Students

**Individual people
and
Volunteers**

**Technological
and Research
Centers**

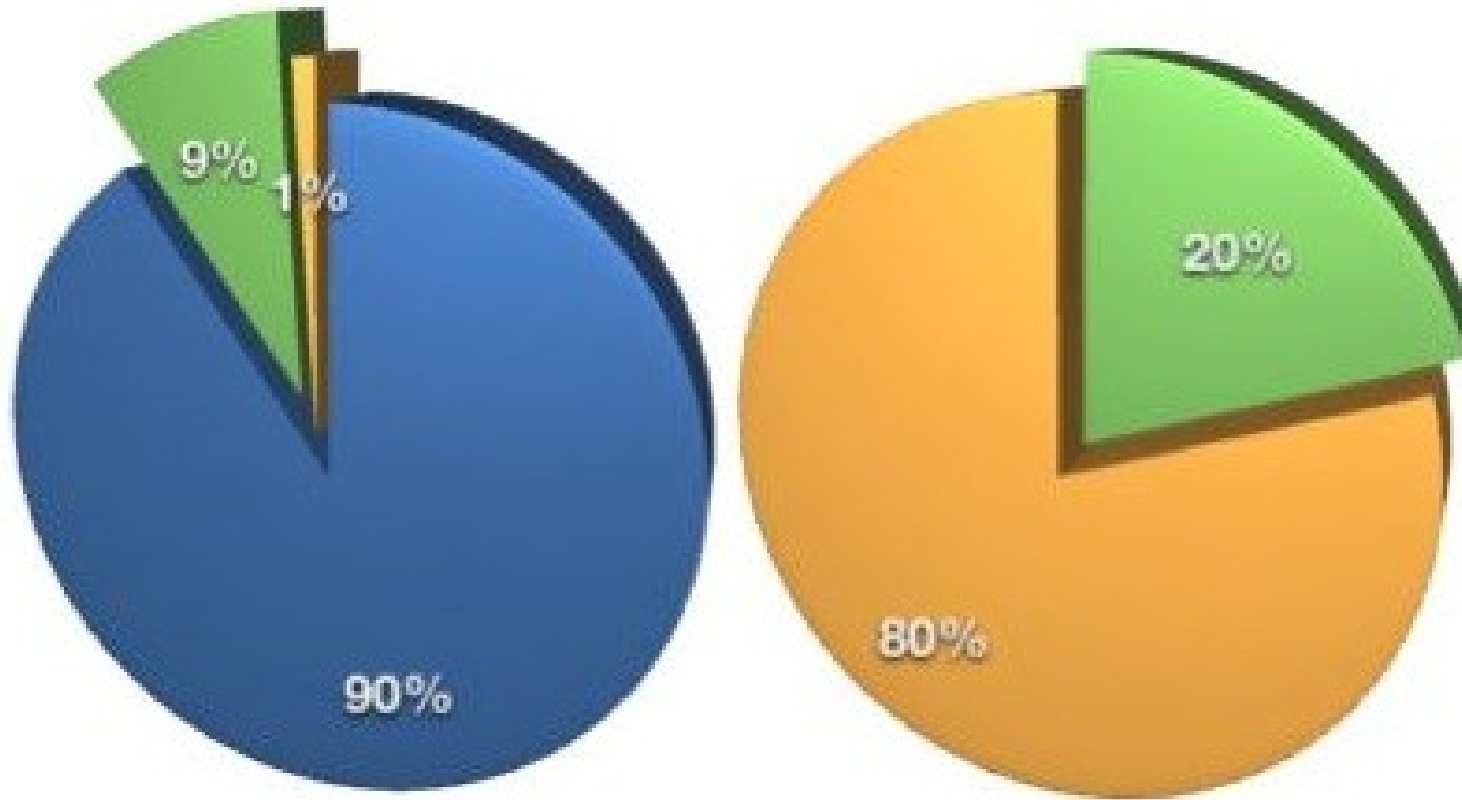
**Artists and
Creative People**

Elements that keep communities together

- **Beliefs, ideology**
 - The four freedoms of Free Software
 - Freedom of election and action
 - Knowledge must be shared
 - Information is a commons
- **Values, essential and perdurable principles**
 - Community and cooperative work
 - Collective intelligence
 - Asertivity (rejection of political correction)
 - Transparency
 - Proactivity
 - Meritocracy
- **Rules**
 - Las propias de cada comunidad
- **Tools**
 - Development tools
 - Mailing lists
 - Wikis
 - Versioning control systems
 - etc.

Typical Participation in Communities

Participation Inequality



90% lurkers, 9% intermittent, 1% active
20% created by intermittent, 80% by active

DebConf 10 – New York



DebConf 7 - Edinburgh



DebConf 5 - Helsinki



Linux Kernel Summit (2008)



Mozilla Camp 09 (Prague)

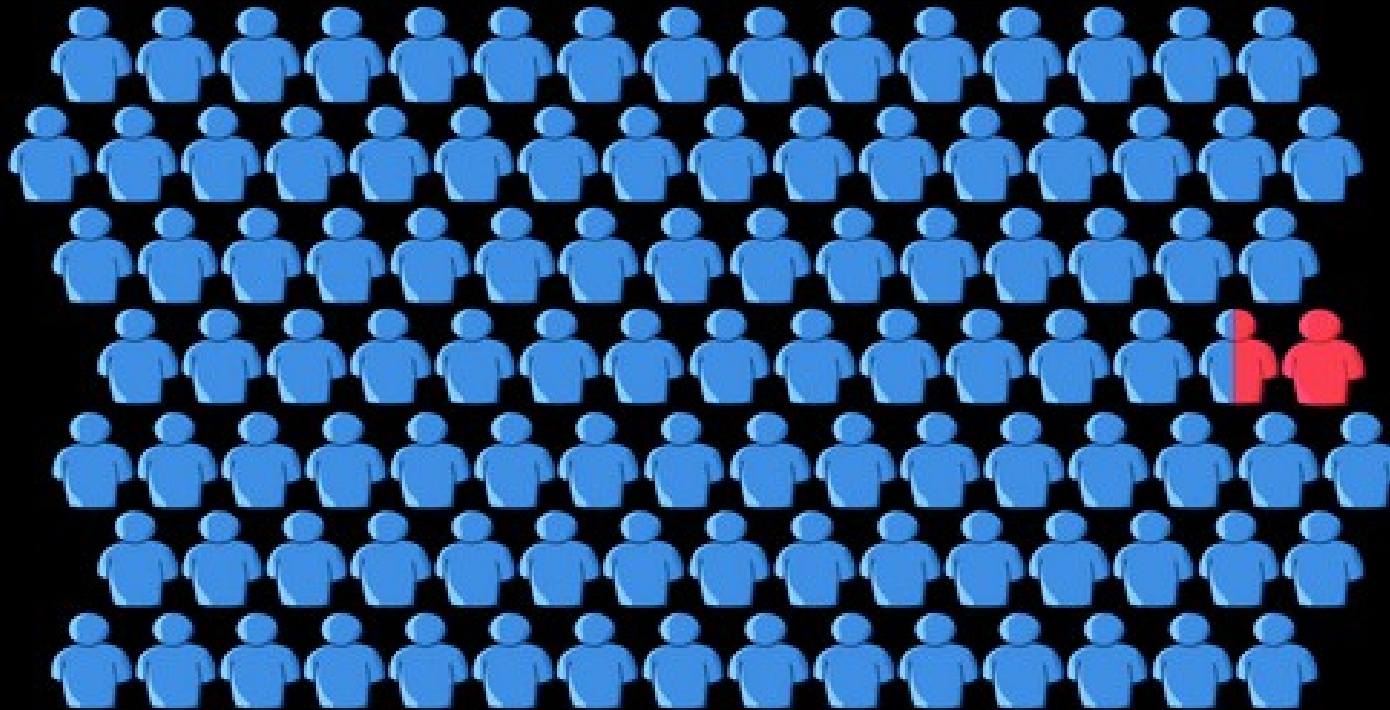


Have you noticed how
many women appeared
in the photos?



The big question!

How many women are developing Free Soft?



Open source developers: 1.5%

FLOSSPOLS Report (2006)

In this talk I'm going to concentrate in certain points that I believe could be improved inside Free Software Communities. I'm going to criticise, then, those things that do not work as good as they should, or that could be improved.

This should not make us forget that Free Software and its communities are projects with unmeasurable benefits at different levels: ethical, social, cultural, political, economical, etc.

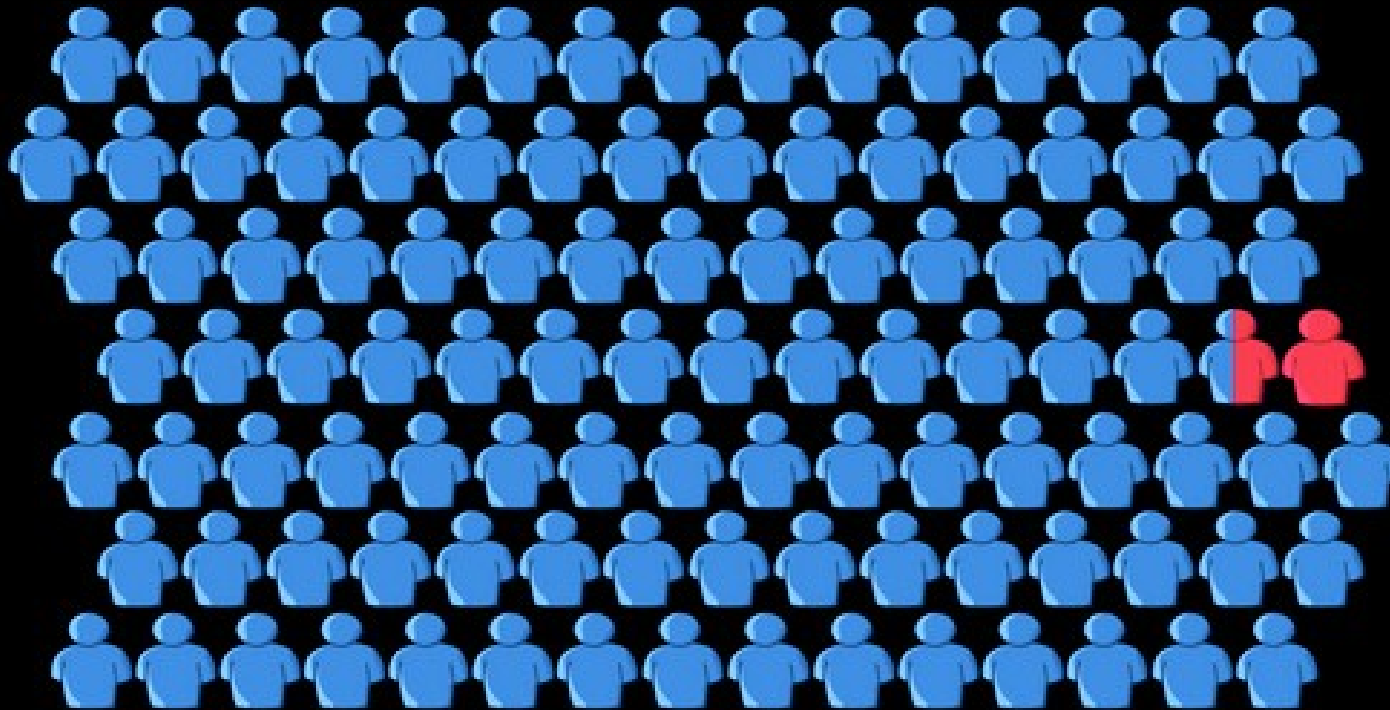
Don't this critics let us lose the global view:

Free Software and its associated culture is worth it, and it compensates to get involved in it.



Warning!

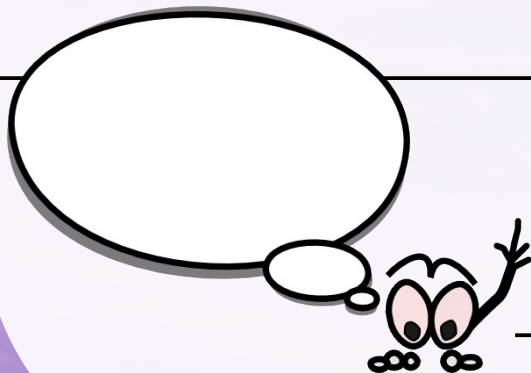
How many women are developing Free Soft?



Open source developers: 1.5%

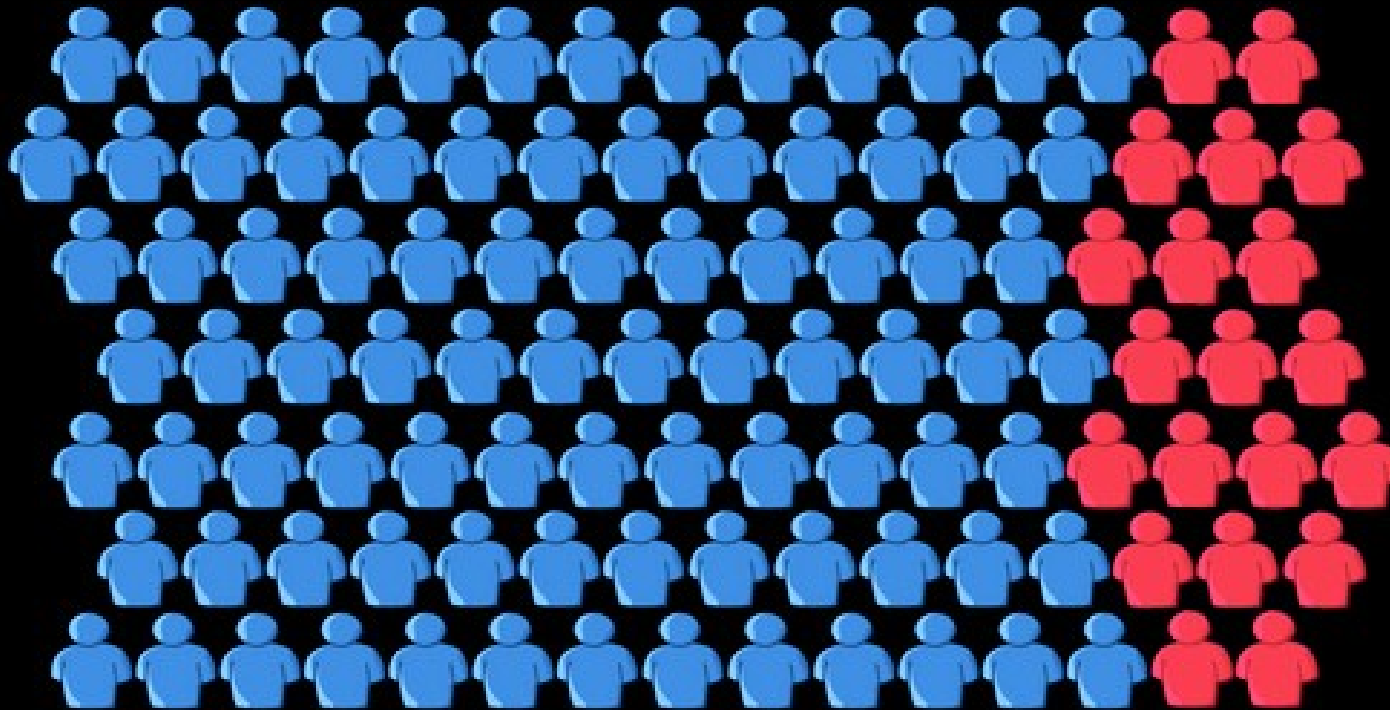
FLOSSPOLS Report (2006)

Yeah, like in every
technological field,
isn't it?



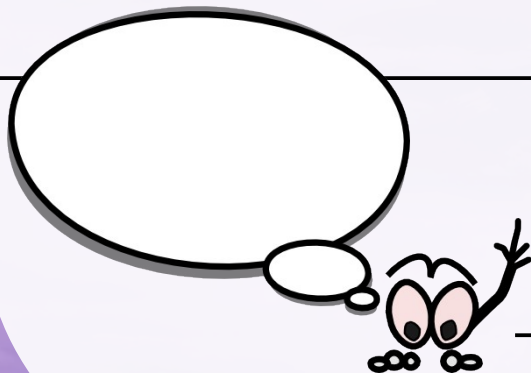
Really?

How many women are developing technology?



Tech industry: 20%

Yeah, right, but the
computer world has
always been a men's
thing!



What are you telling me?

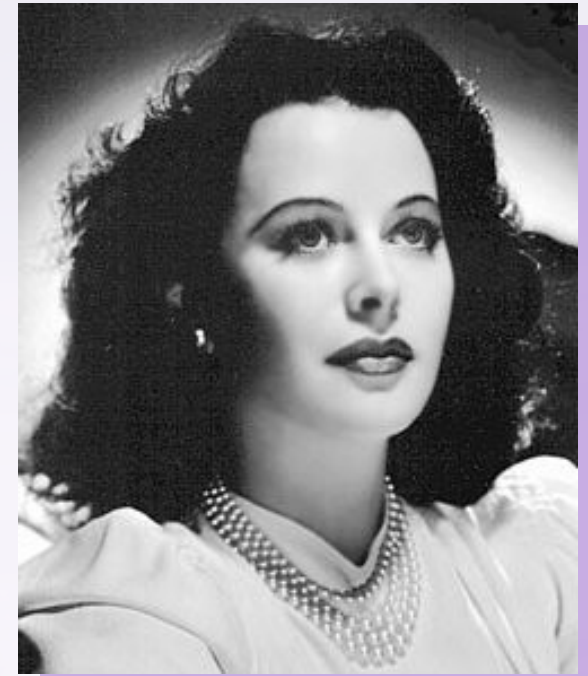
Important women in ICTs



Ada Lovelace



Grace Murray Hopper



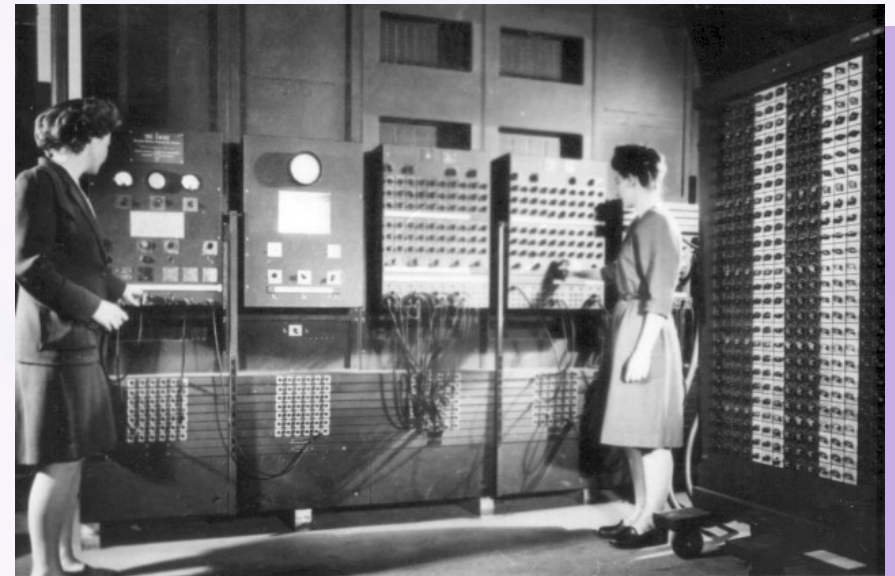
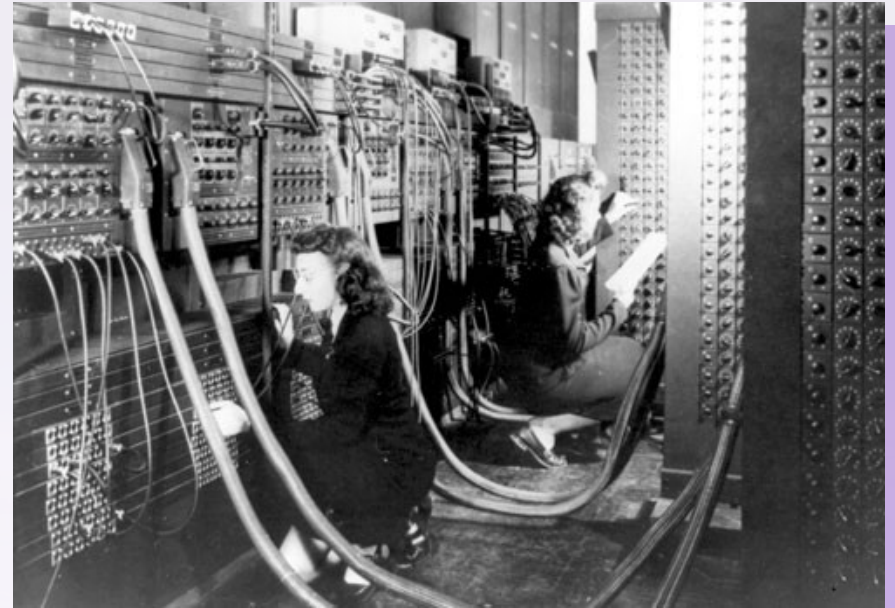
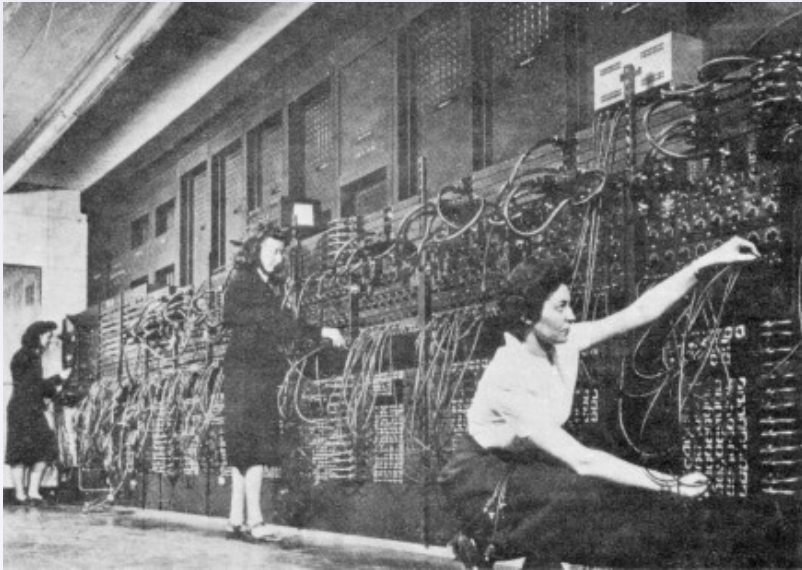
Hedy Lamarr

«Do you pine for the days when men were men and wrote their own device drivers?»



Linus Torvalds (1991)
Original announce of Linux

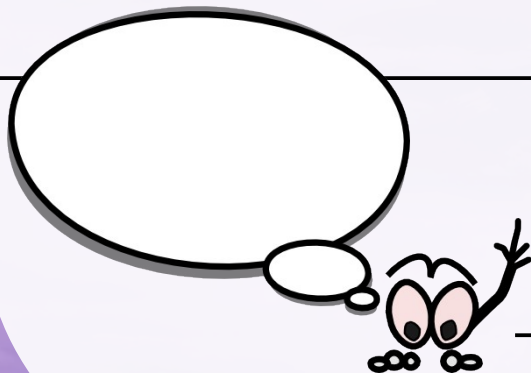
ENIAC: The first programmers



Women and Computers in the 50s



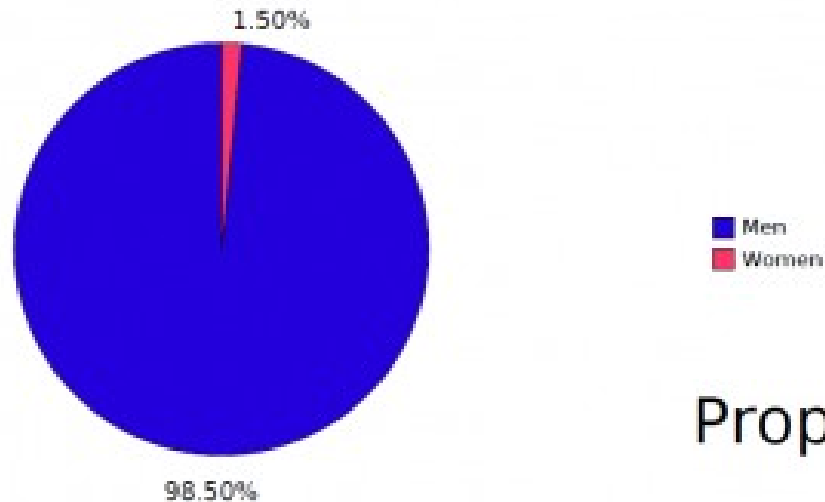
OK, OK... I believe you,
lets get back to the
present...



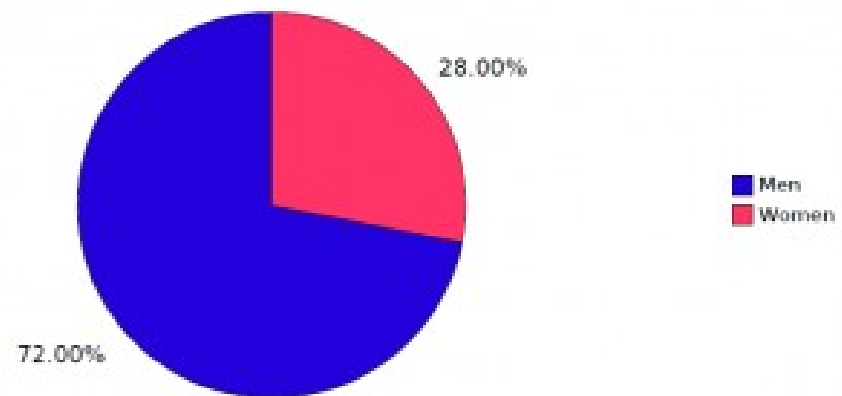
Back to the XXI Century

The big question: Why such a big difference?

Free Software



Proprietary Software



FLOSSPOLLS Report (2006)

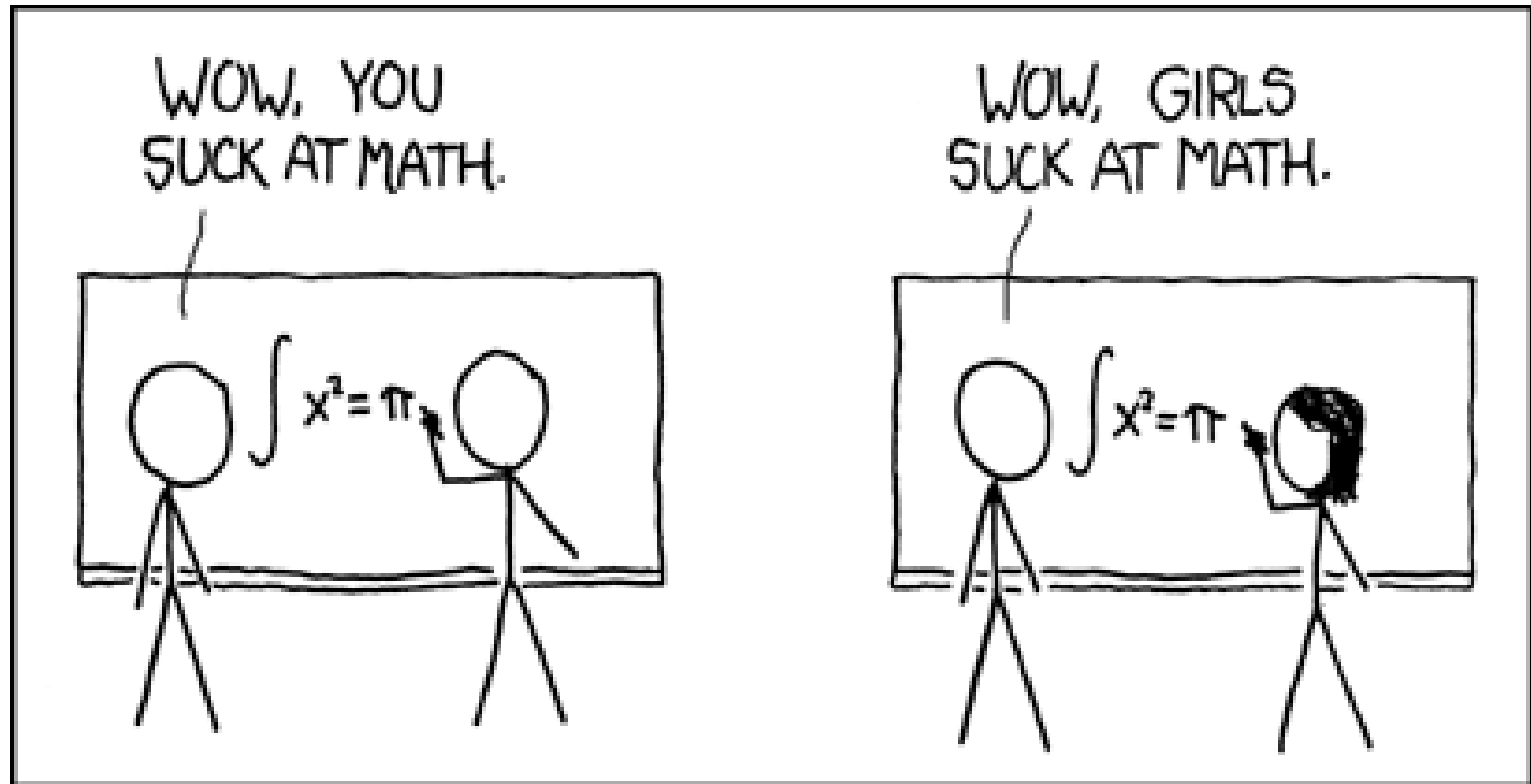
There should be more women

- Women are **more than the half** of the current population in the world.
- To **extend the use** of free software to women, it is important to have enough female developers, because we can perceive better other women's needs, and the problems and improvements to concentrate on.
- **Diversity** is a value: To diversity, better ideas.
- There are many women who might be interested in contributing, and should **not be left out for reasons unrelated to development** itself.
- The **more people** developing, the better the results.
- The low numbers of women involved, besides being a problem in itself, are also a **symptom that there are many things that need to be improved**, for everyone's sake.

Some possible reasons

- **Educational system**: Lack of motivation of the girls for technological stuff.
- **Social environment**: Women are not usually invited to get involved in Free Software communities.
- **Pygmalion Syndrome**: Technology is not considered a girls' thing.
- **Lack of role models** that can serve as a reference for other females.
- **Low technical self-esteem**.
- **Aggressive behavior** in some communities, and greater sensitivity of women to these hostile environments.
- **Sexist attitudes** within communities.
- **Feeling of exclusion** or non-membership in some communities.
- **Difficulties to share hobbies** with other friends.
- **Lower social value**, geek stuff is not always well considered in girls.
- Lower **spare time** availability for women.
- Lower expectations of **proactivity and assertivity** for women.
- **Perception** of free software development as a **non-social activity**.
- **Different treatment and expectations** for men and women in the interactions with the community.

Stereotypes



<http://xkcd.com/385/>

But that's for Girls!

I was talking to someone on #kernelnewbies. The poor guy was suffering from analysis paralysis, what with so many guides and how-tos out there. And he was taking a survey to determine which guide was most recommended so he could read that one (which I think is such a waste of time; just pick one and read it, and if it doesn't help, pick out another one).

He asked me which kernel guide I recommended reading just for starters. I mentioned Val's *"LinuxChix Kernel Hacking Lessons"*.

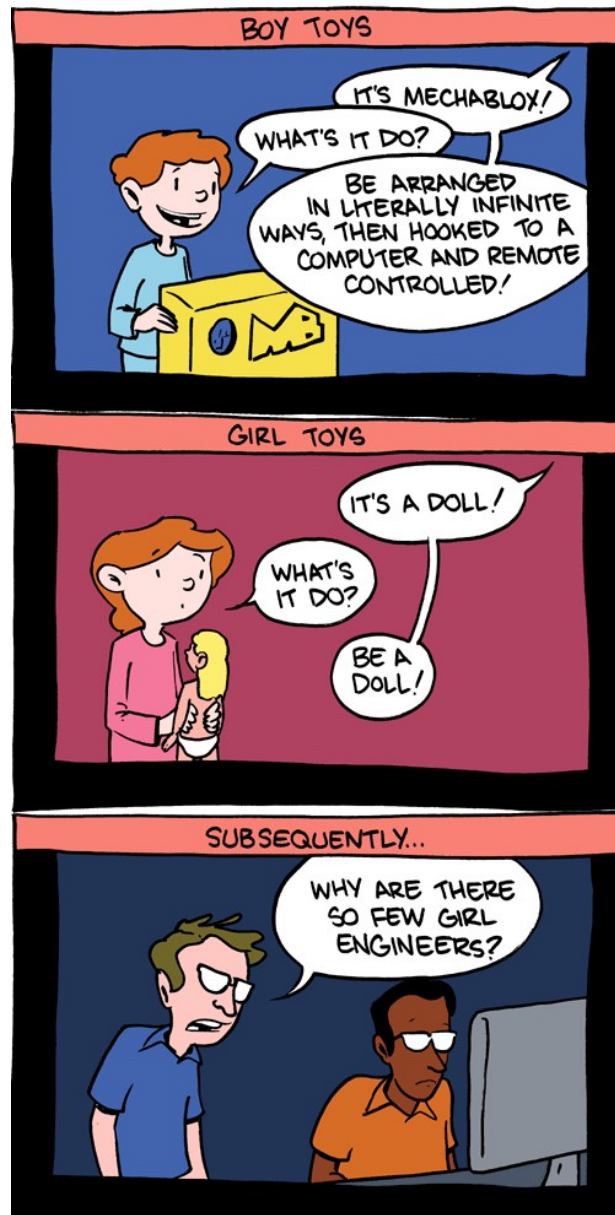
He answered with **"but that's for girls!"**

I thought his response was very funny, so I wrote a parody of it for my diary.

<http://www.advogato.org/person/pjcabrera/diary.html?start=13>

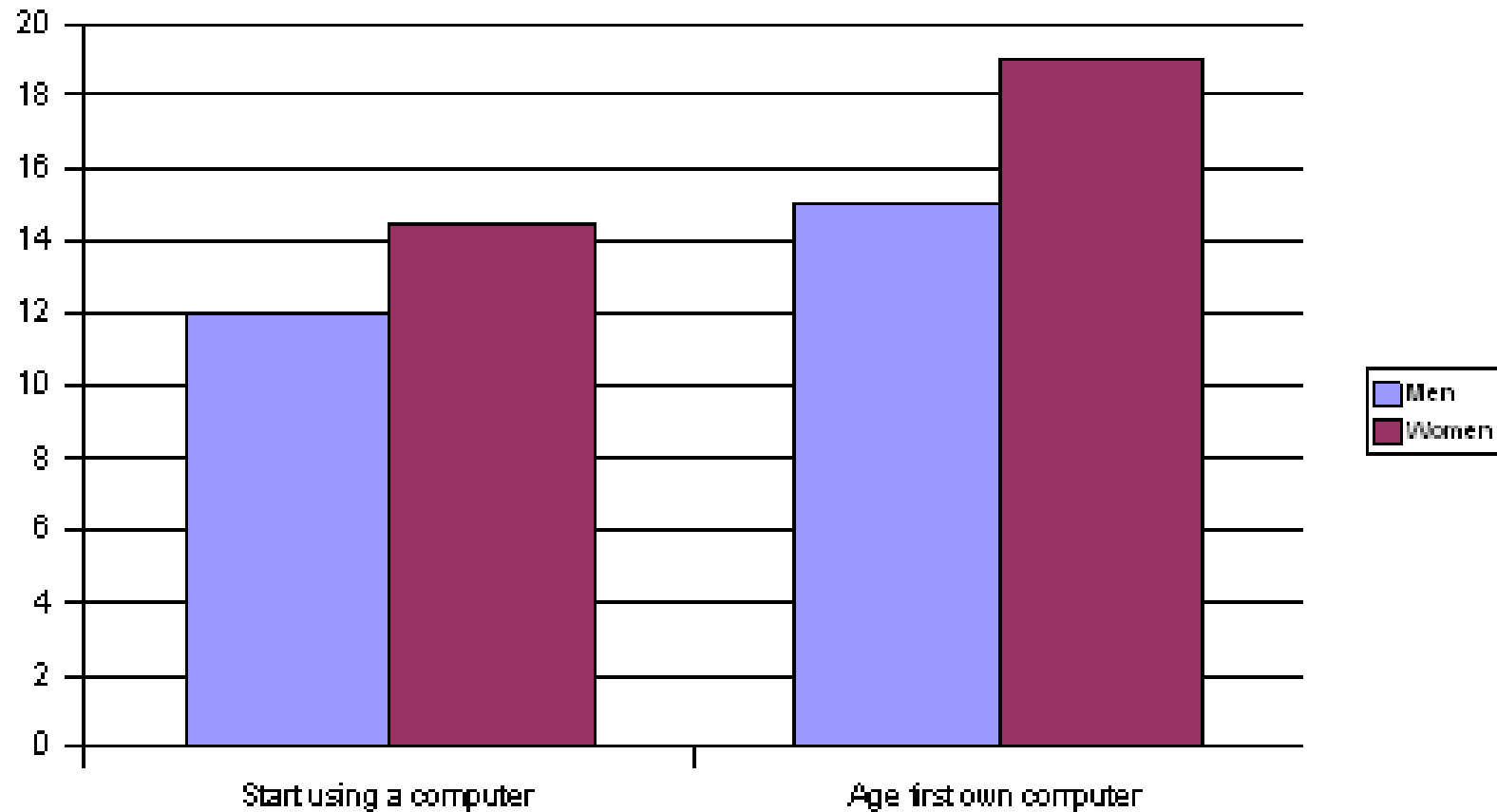


The neverending problem of toys



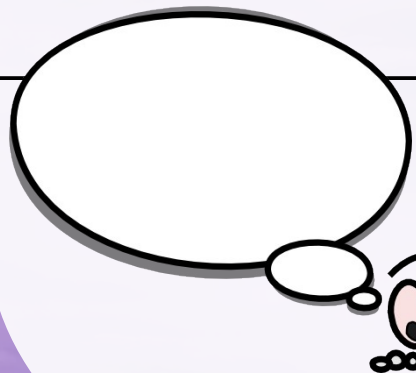
<http://www.smbc-comics.com/index.php?db=comics&id=1883>

At which age did you get your 1st computer?



FLOSSPOLs Report (2006) – Information about Free Software Developers

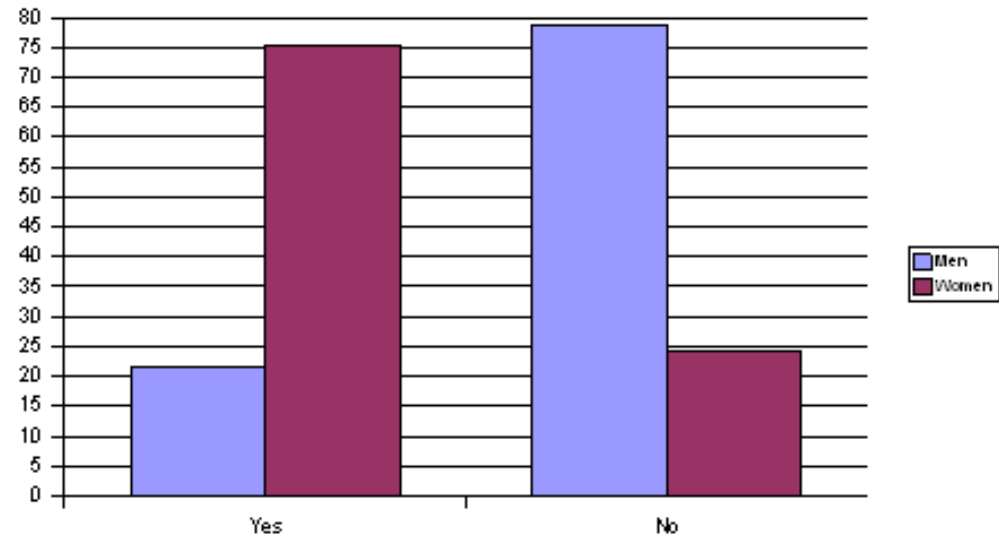
But, is there Sexism in Free Software Communities?



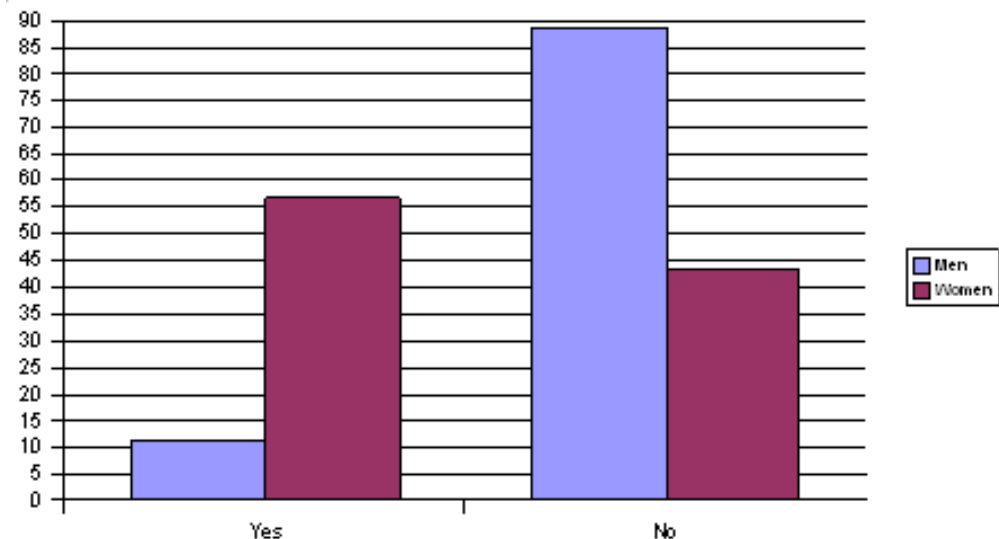
What about sexist attitudes?

Is there Sexism in Free Software?

In Free Software Community as a whole:

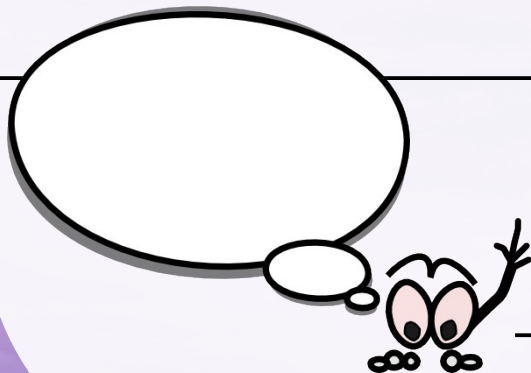


In the communities that you're contributing to:



FLOSSPOLS Report (2006) – Information about Free Software Developers

But on the Internet there
are no genders, no races,
no physical differences.
Everything is virtual, there
are only bits and bytes



0100 0110 1101 0001 ...

On the Internet, nobody knows you're a dog

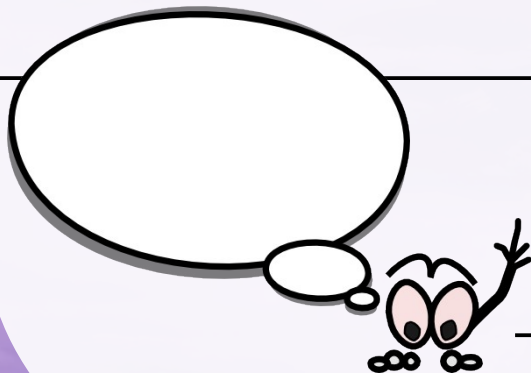


"On the Internet, nobody knows you're a dog."

In the real world, this isn't so

- Free Software development is **an activity as social as technical**.
- Even though our physical bodies are not involved in online interactions, our **gender conditioning does affect**.
- **Face meetings** are a very important part of Free Software: seminars, conferences, meetings, working groups, etc.
- Anonymity creates distrust. Free Software communities are based on trust, and therefore it is usual that sooner or later your **identity** is voluntarily disclosed. People will know that you're a dog.
- **We shouldn't need to hide**. In fact the only way to increase the visibility of women in Free Software is sticking up.
- Somehow, maybe due to our education, women often tend to appreciate having **face contact** at some point when we get involved in a Free Software community.

Yeah, well, but in fact
there are equal chances:
if you want, you can!



Wasn't it a Meritocracy?

Natural Selection and Meritocracy

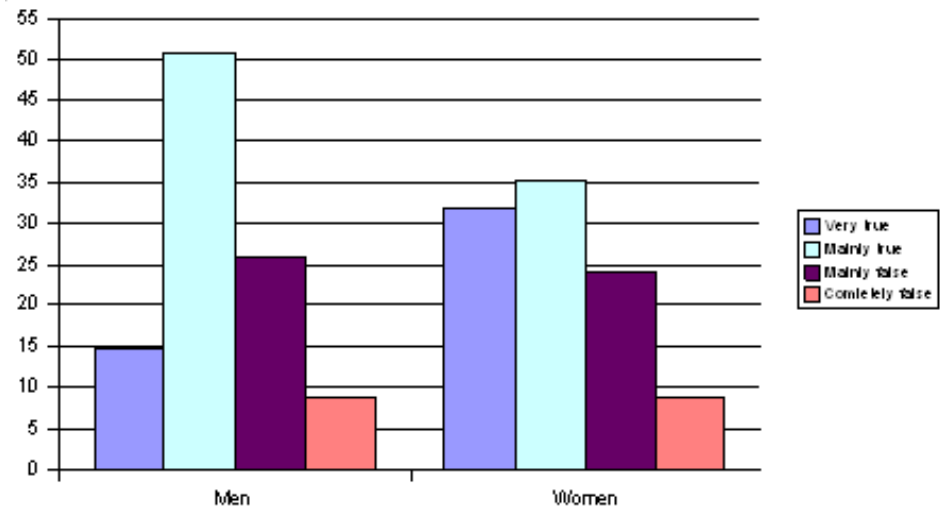
- Free Software configures a **development paradigm within equals**, in which there is no hierarchical authority, that exploits the **mechanisms of natural evolution** to improve quality.
- The people in charge of the projects are situated there on the basis of **meritocracy and active participation**, by selecting those who make high value contributions, and getting rid of those who don't contribute.
- **Meritocracy is essential** in the value system associated to Free Software. Free Software is not a democracy, but a meritocracy.
- **Meritocracy guarantees a fair social environment**, rewarding good work, commitment and relevant skills through the evaluation of the actions, and not the person.

The Myth of Meritocracy

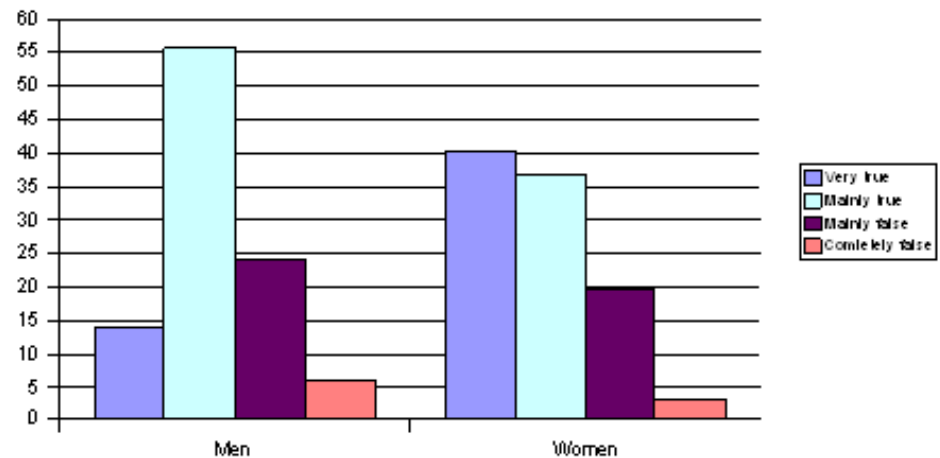
- **Meritocracy in Free Software is a myth** in the same sense as fairness and equality in occidental societies, or objectivity in science.
- Even though it is indeed a key factor in getting recognition within the community, **it is not the only factor**.
- **If you have the right profile, and contribute to the appropriate project in the right way**, Free Software is actually a meritocracy.
- But meritocracy as a sole factor is not capable of explaining the situations of power that exist within the Free Software communities.
- **What is really valued when measuring merit?** → code development? tests? Documentation? Translations? Design? Technical support? Participation in the community?
- **Are contributions what is really valued, or their disclosure and advertisement?**
- The **self-confidence needed to publicize** the merits is **highly skewed in terms of gender**.

Do they look at what we do or at what we are?

Do women receive more attention for being women in digital environments?



Do women receive more attention for being women in offline interactions?

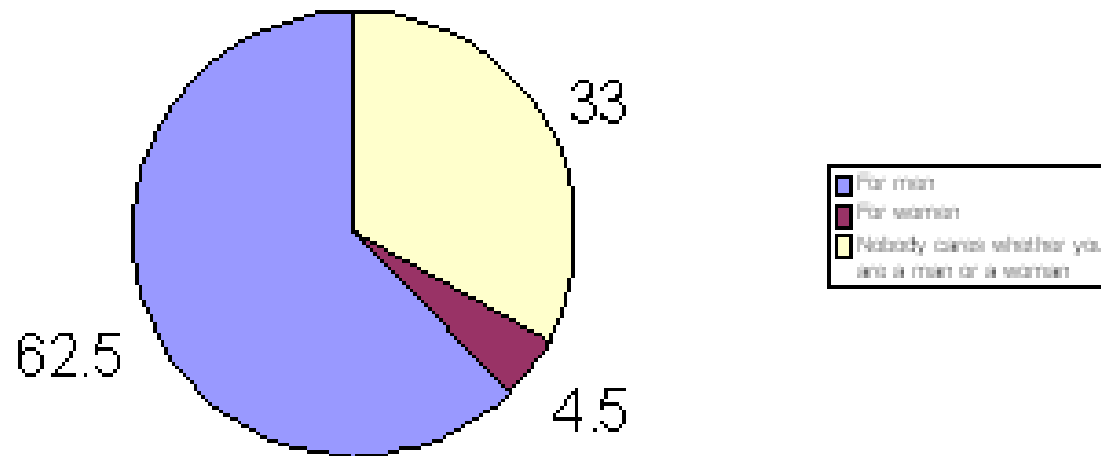


FLOSSPOLs Report (2006) – Information about Free Software Developers

Is it more difficult to get recognition?

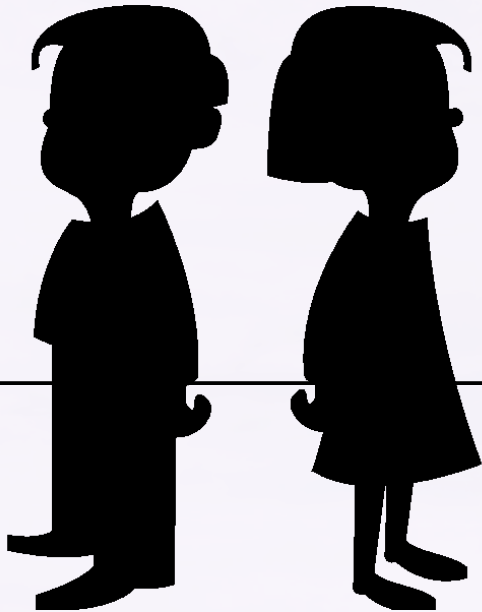
What men think:

What women think:



FLOSSPOLLS Report (2006) – Information about Free Software Developers

Is it better to create groups of women only or mixed?



Better together
or separated?

Critical social mass

The Byrne scale of non-traditionality (1993):

- **Above 30%:** The subject is considered as normal for people of both genders, and therefore the discipline is seen as gender-neutral .
- **Between 15% and 30%:** Seen as normal for the majority gender and untypical but gender-normal for the minority one
- **Between 8% and 15%:** Seen as normal for the majority gender and abnormal for the minority one . Only the people that are not bothered by being considered weird feel comfortable.
- **Up to 8%:** Seen as normal for the majority gender and both abnormal and 'the rubric of exceptions' for the minority one, i.e. they do not even count as in any way representative or as transferable models.

Women-only communities

- Make it possible to achieve a **critical social mass** that allows more women to feel comfortable inside the community.
- Make it possible to structure the group around **more traditionally female values and preferences**.
- Give **visibility** to the contributions made by women and, thus, promote the visibility of women and compensate for the shortcomings of the system regarding **meritocracy**.
- **Increase the technical self-esteem** of many women.
- Make it possible for many women to **enjoy their hobby** without having to be constantly on the defensive side.
- Have a **safe place** regarding aggressions and gender violence in all of its dimensions.
- Make it possible to **share experiences and feelings** with peers that will possibly understand you better.

Robber's Cave Experiment (1954)

- **Three phases:**
 - **In-group formation:** 22 eleven year old male boys, organized between two groups ("The Rattlers" vs. "The Eagles"), initially unaware of each other's existence. Internal hierarchies arise spontaneously..
 - **First contact and friction phase:** Hostility between groups and intergroupal cohesion. The friction between the groups increased so much that the 3rd phase was brought forward for safety reasons.
 - **Integration between the groups:** To reduce the hostility between the groups, they were subjected to tasks that required cooperation (they could not be finished by any of the groups on its own). The conflicts decreased significantly with this.
- When people without any pre-established relations share activities with common goals, a group structure is generated.
- If the groups relate to each other in terms of **competition and frustration, intergroupal hostilities arise**, and are standardized and shared by the members of each group.
- **Working together to achieve super-ordinated goals** (shared causes, disaster response, common enemy effect) **decreases hostilities and establishes cooperative links** between the groups.

Sex or Gender: Which is really the problem?

- Involvement in Free Software communities **requires effort, proactivity, assertivity, self-confidence in your own capabilities, being able to display your own achievements, losing the fear of being noticed, etc.**
- For **sociocultural reasons**, the education of women and the established social roles make that these abilities are best seen in males and, thus, not all the women develop their full potential.
- Many Free Software communities are **very competitive**, and there are often **verbally aggressive attitudes**. Even though these attitude are not intrinsically sexist, they tend to affect more women than men.
- In many communities, **it is necessary to develop a “thick skin”** to make you less sensitive to verbal attacks.
- **What happens with men and boys** who do not have a “macho” personality, in the worst sense of the word?

Women's groups in Free Software

- Syssters (Anita Borg Institute) (1987) - <http://anitaborg.org/initiatives/syssters/>
- KDE Women (1998) - <http://women.kde.org/>
- **LinuxChix (1999)** - <http://www.linuxchix.org/>
- **Debian Women (2004)** - <http://women.debian.org/>
- Gnome Women (2005) - <http://live.gnome.org/GnomeWomen>
- PHPWomen (2005) - <http://www.phpwomen.org/>
- Women@apache.org (2005) -
http://mail-archives.apache.org/mod_mbox/www-women/
<http://wiki.apache.org/Women/>
- ChicasLinux (2003/2006) - <http://www.chicaslinux.org/>
- Ubuntu Women (2006) - <http://ubuntu-women.org/>
- Fedora Women (2006) - <http://fedoraproject.org/wiki/Women>
- WikiChix (2006) - <http://wikichix.org/>
- DrupalChix (2008) - <http://groups.drupal.org/drupalchix>
- **Geek Feminism (2009)** - <http://geekfeminism.org/>
- Women & Mozilla (WoMoz) (2009) - <http://www.womoz.org/>
- FSF mini-summit for women + FSF Women's Caucus (2009-2010)

LinuxChix: Be Polite, Be Helpful



LinuxChix

- International group that borns with the goal of supporting women interested in Linux.
- Key point: Create a space in which women can feel safe.
- Main rule: «Be Polite. Be Helpful.»
- Targeted both at female users and developers.
- Men can also participate, but it is intended that the organization and structure of the group is kept on female hands.
- There are different chapters or local groups in different regions of the world.
- It has been a great reference point and inspiration for many groups that came afterwards.

LinuxChix miniconf 2009



Debian Women



debian
women

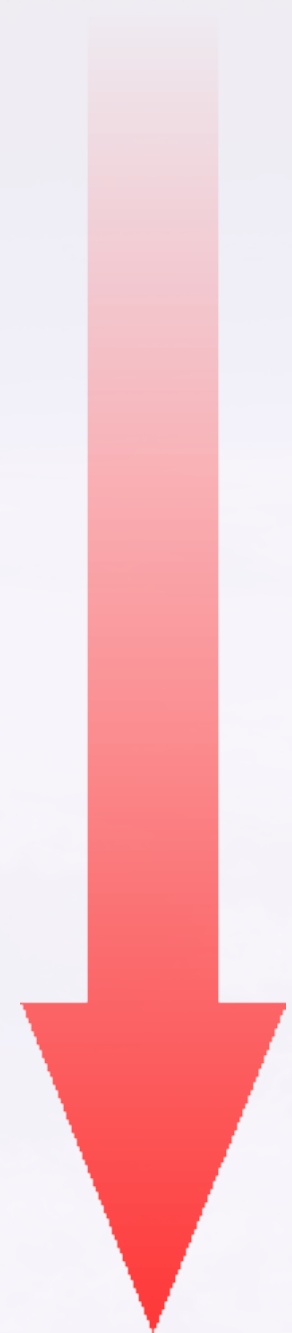
Debian Female Developers

1993-08-16 Debian

- 1996-04-18 Susan G. Kleinmann (sgk)
- 2000-10-29 C. M. Connelly (cmc)
- 2001-05-30 Amaya Rodrigo Sastre (amaya)
- 2004-01-23 Petra Malik (petra)

2004-06-21 Debian Women Project

- 2005-07-15 Helen Faulkner (helen)
- 2005-11-16 Margarita Manterola (marga)
- 2006-06-14 Marcela Tiznado (mlt)
- 2006-07-04 Erinn Clark (erinn)
- 2006-10-16 Ana Beatriz Guerrero Lopez (ana)
- 2007-03-14 Christine Spang (christine)
- 2008-02-10 Christine Caulfield (chrissie)
- 2008-04-18 Meike Reichle (meike)
- 2008-04-18 Miriam Ruiz (miriam)
- 2008-05-29 Petra's account locked due to inactivity
- 2009-12-15 Susan resigned
- 2010-09-04 Gerfried Fuchs (rhonda)



DebConf 4, Porto Alegre (Brazil)



Debian Women

- It is not a women's group.
- It is not a female user's group.
- It is not a Linux distribution different from Debian.
- It is not a community different from Debian.
- It is a **working team**, inside Debian, composed by males and females, **whose goal is to get more women involved in the development** of Debian.
- It is a entry point, not a place to just stay.
- It allows lowering the entry barrier for many women, so that they can end up integrating inside Debian.
- It has counted from the very beginning with unvaluable support from an important part of the Debian community.
- There have also been hard times (trolls, death threats in 2005 and 2008, etc.)
- **It has contributed to improve the social environment inside Debian**, making it more collaborative and less aggressive.

DebConf 5, Helsinki (Finland)



Spanish Debian Women

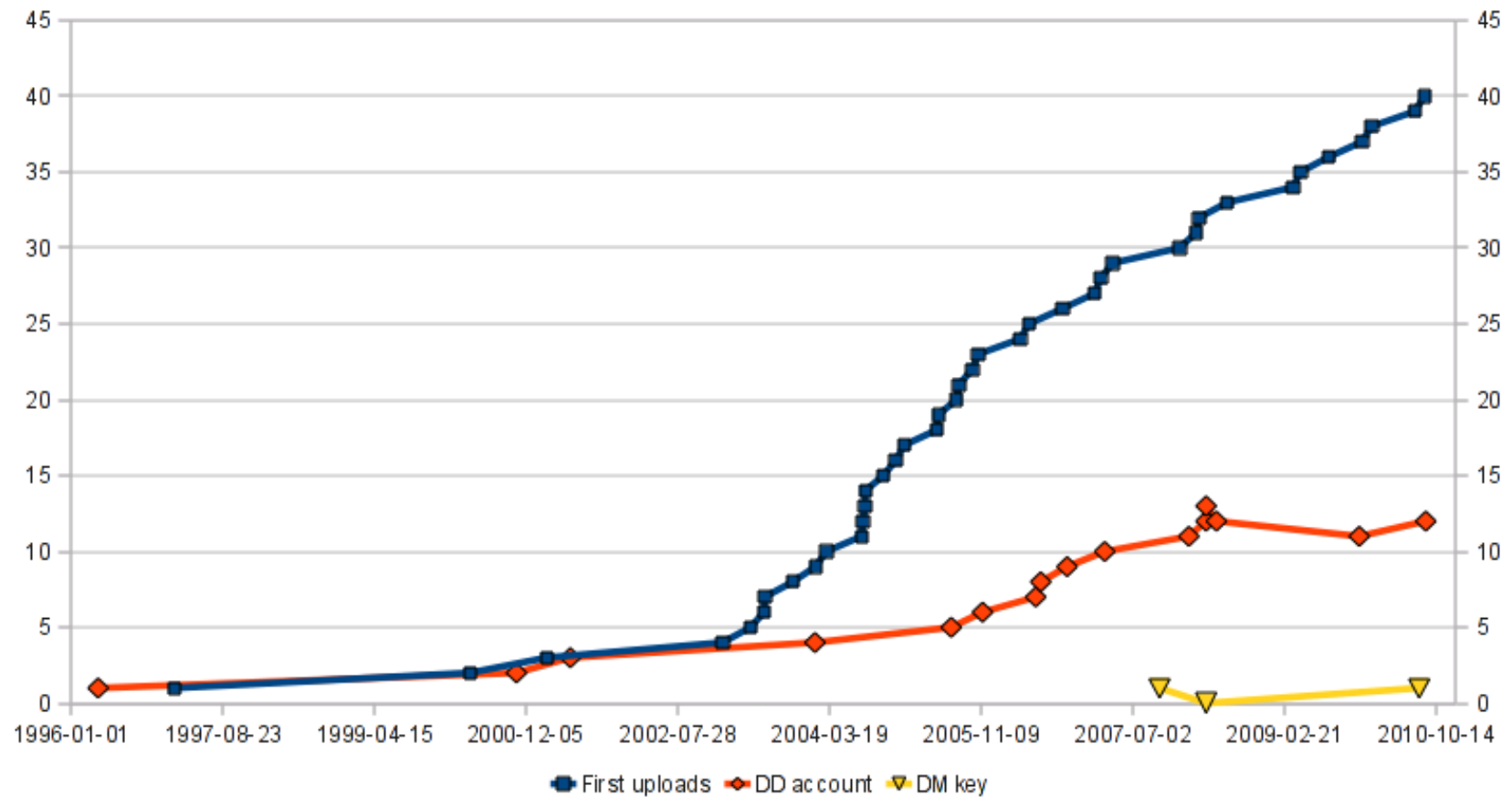
Amaya Rodrigo



FOSDEM 2008 (Bruselas)

Women in Debian

Female participation in packaging in Debian



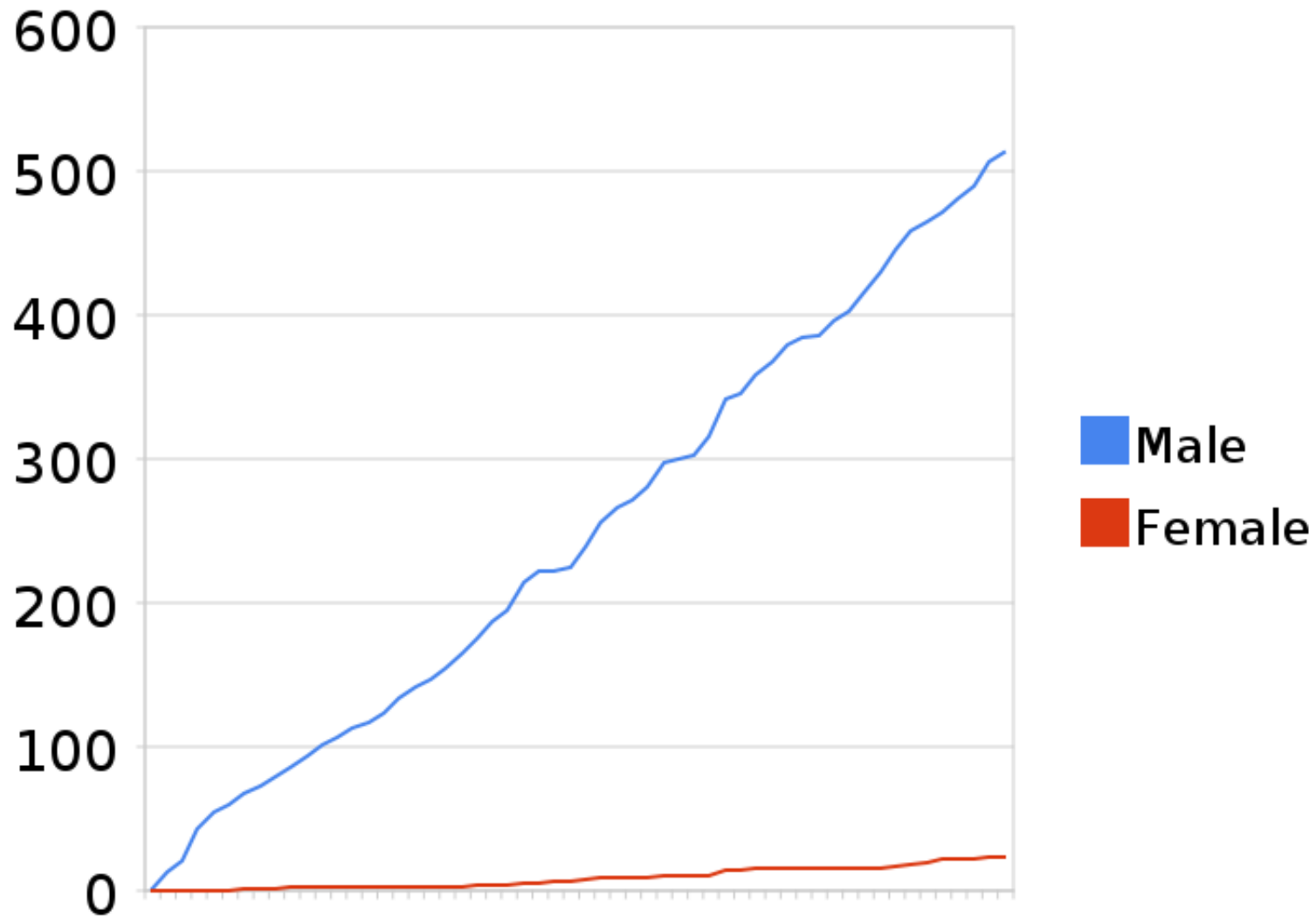
<http://wiki.debian.org/DebianWomen/Statistics>

Ubuntu Women

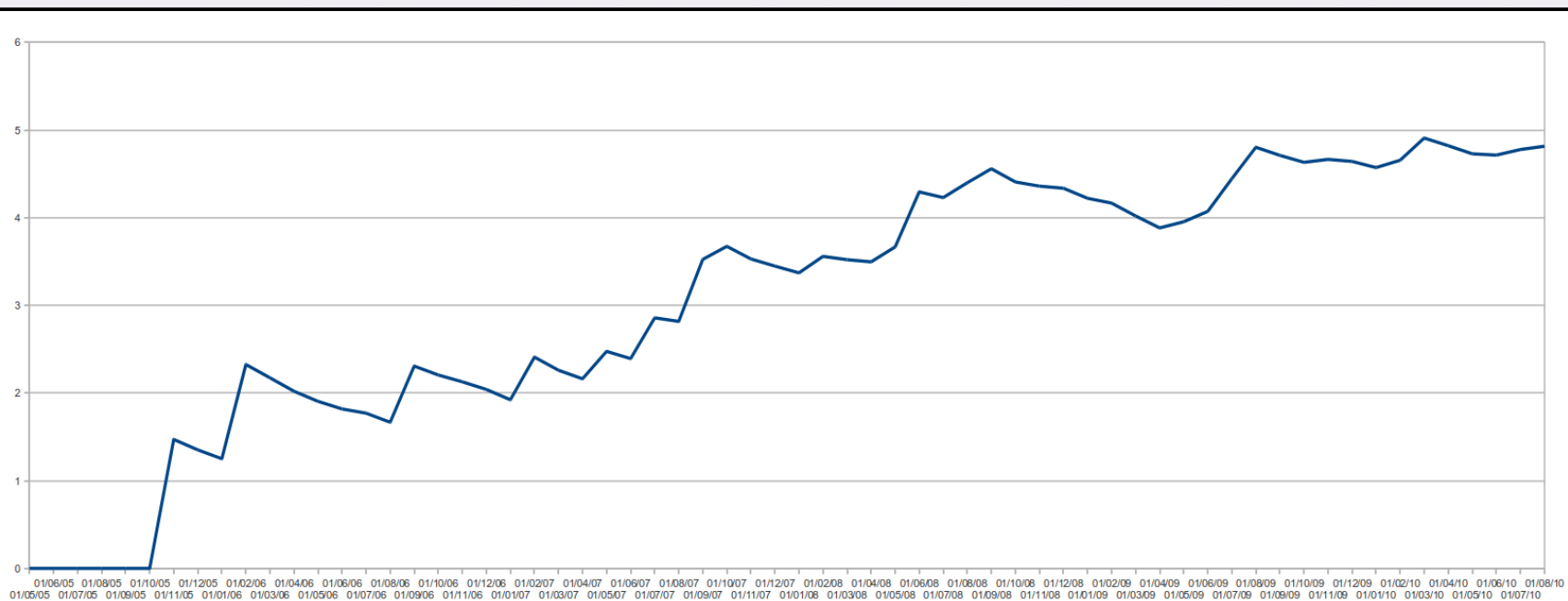


Ubuntu Members

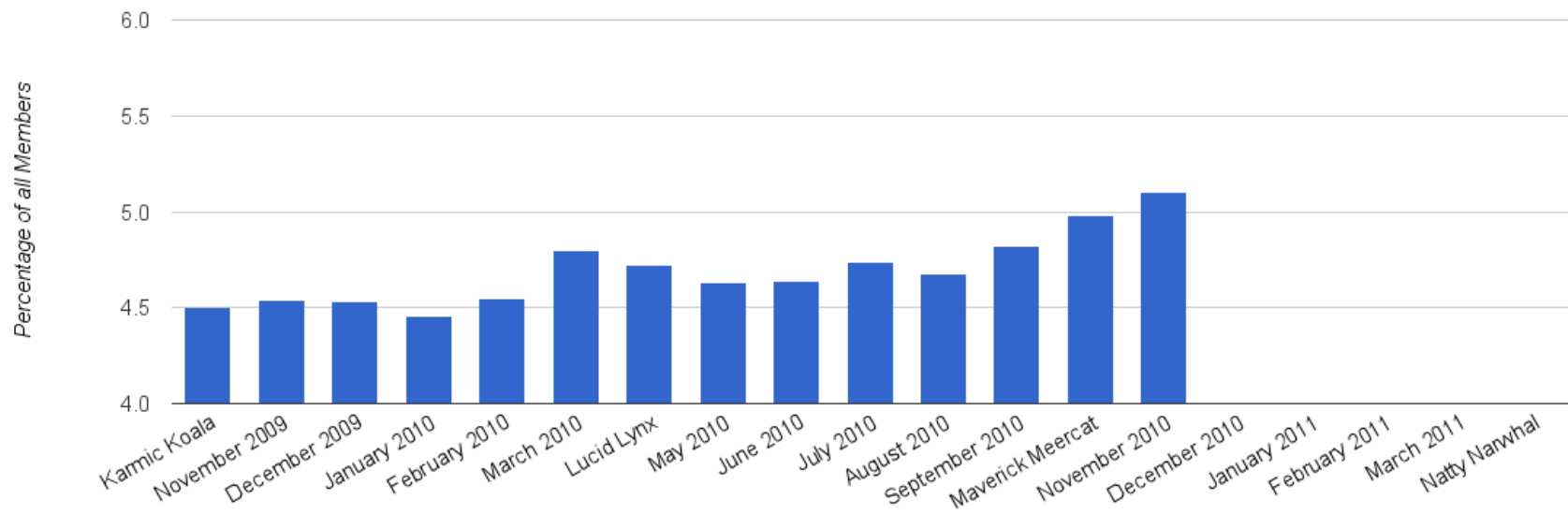
Ubuntu Members from 2005 to present



Women in Ubuntu



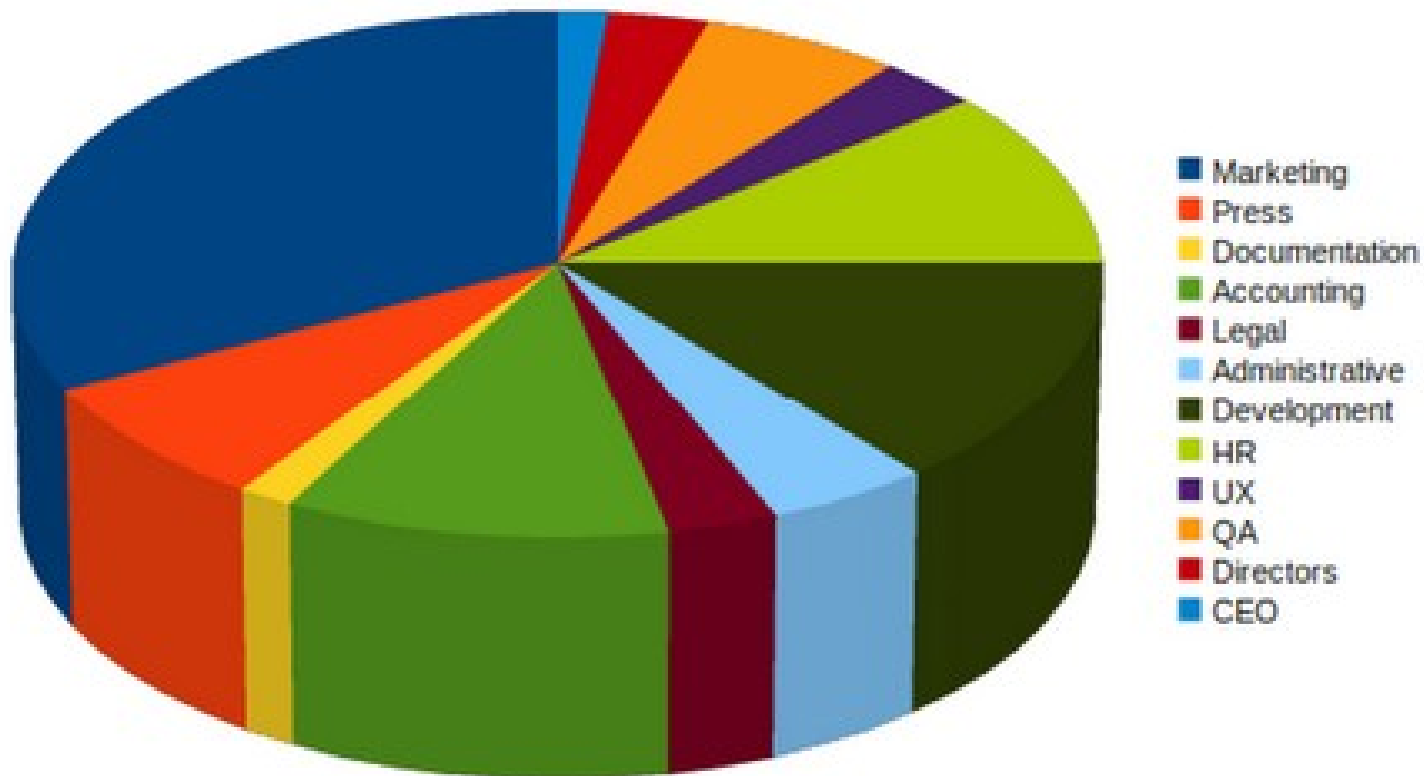
Women Ubuntu Members



Women & Mozilla (WoMoz)



Working areas of Women in Mozilla



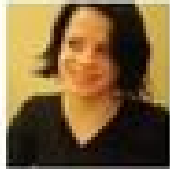
<http://www.womoz.org/blog/number-of-women-in-mozilla/>

Some numbers

- Debian: 1.3 % women
 - 12 active developers from a total of 873
 - <http://wiki.debian.org/DebianWomen/Statistics>
- Ubuntu: 5.1 % women
 - 32 women, 625 people in total
 - <https://lists.ubuntu.com/archives/ubuntu-women/2010-November>
- Mozilla: 16.75 % women
 - 68 women, 406 people in total
 - <http://www.womoz.org/blog/number-of-women-in-mozilla/>

Geek Feminism

We **kick ass!**



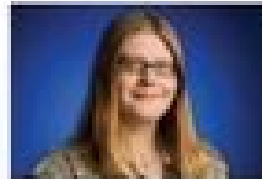
Penny Leech
Moodle



Selena Deckelmann
PostgreSQL



EmmaJane Hogbin
Ubuntu, Drupal



Leslie Hawthorn
Google



Mitchell Baker
Mozilla



Addison Berry
Drupal



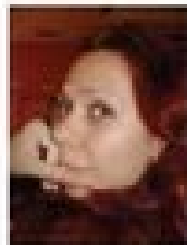
Dru Lavigne
*BSD



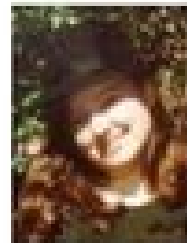
Allison Randal
Perl



Liza Kindred
Drupal



Sulamita Garcia
Linux



Jacinta Richardson
Perl



Danese Cooper
OSI



Valerie Aurora
RedHat



Stormy Peters
GNOME

More at <http://ada.pint.org.uk/> and
<http://geekfeminism.wikia.com/>

OK, so there are still
a lot of things to do,
What are the next steps?



Where to go from here?

Two big fronts

- Women:
 - Lose the fear
 - Develop assertiveness and proactive attitudes
 - Improve technical self-esteem
 - Improve capability of response to verbal aggressions
 - Be receptive to the adoption of the values of Free Software communities. Don't pretend to change everything
- The community itself:
 - They have an internal social inertia that must be gradually defeated
 - Free Software communities are already multicultural and diversity is valued
 - Promote respect for women
 - Professionalization
 - Lower entry barriers
 - Improve the overall values by incorporating values more traditionally feminine

Some important points for the future

- Most communities are **already aware** of the problem.
- Almost all serious communities are **trying to do something** to encourage the incorporation of more women.
- Establishing links and **coordination** among the women participating in **different projects**.
- **Systematization** in the identification of barriers: At what point in the chain are women falling behind? Do they not use our software? Do they not want to develop? Have they tried but have gone back after getting in touch with the community? Do they not have time? Do they lack of knowledge?
- It is necessary to establish **metrics and goals**.
- It is necessary to develop mechanisms to **lower entry barriers**: mentoring, women's groups, redefinition of core values, visibility, working with younger girls, etc..
- **Professionalization** of the organizations, and promotion of respect and friendly attitudes in them.

In this talk I have concentrated in those aspects related to Free Software, and society in general, that makes it harder for women to get involved in it.

Neither males nor females are the problem. The problem lies in the system, and we can only overcome it together.

Even though I have concentrated in the problems, Free Software communities also treasure a lot of positive values that I have not properly analyzed here, and that are necessary to have a fair and objective vision.

Free Software and its associated culture is worth it, and it compensates to get involved in it.



I repeat the warning!

You're Free to ask!



Links

- http://www.flosspols.org/deliverables/D16HTML/FLOSSPOLSD16-Gender_Integrated_Report_of_Findings.htm
- http://www.cs.umass.edu/~wallach/talks/women_in_FLOSS.pdf
- <http://infotrope.net/blog/2009/07/25/standing-out-in-the-crowd-my-oscon-keynote/>
- <http://www.codeanthem.com/blog/2010/03/should-you-judge-a-developer-by-their-open-source-contributions/>
- <http://itmanagement.earthweb.com/osrc/article.php/3850561/Open-Source-Projects-and-the-Meritocracy-Myth.htm>
- <http://wiki.debian.org/DebianWomen/Statistics>
- <http://www.perrier.eu.org/weblog/2010/08/07#devel-countries-2010>
- <https://lists.ubuntu.com/archives/ubuntu-women/2010-November/003051.html>
- <http://wiki.ubuntu-women.org/UbuntuMembers>
- <http://www.womoz.org/blog/womoz-internal-survey-results-and-conclusions/>

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