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Expanding Emoji Professions: Reducing Gender Inequality

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Introduction

Google wants to increase the representation of women in emoji and would like to propose that Unicode implementers do the same. Our proposal is to create a new set of emoji that represents a wide range of professions for women and men with a goal of highlighting the diversity of women's careers and empowering girls everywhere.

Amy Butcher's *New York Times* op-ed piece, *Emoji Feminism*, published in March 2016, eloquently frames the current state of female emoji. She writes:

> *"Where, I wanted to know, was the fierce professor working her way to tenure? Where was the lawyer? The accountant? The surgeon? How was there space for both a bento box and a single fried coconut shrimp, and yet women were restricted to a smattering of tired, beauty-centric roles? This was not a problem for our male emoji brethren. Men were serving on the police force, working construction and being Santa. Meanwhile, on our phones, it was Saturday at the Mall of America — women shopping while men wrote the checks."*

While Unicode TR52 brings parity between existing male emoji and female emoji, we believe we can have a larger positive impact by adding 13 new emoji that depict women across a representative sample of professions. We believe this will empower young women (the heaviest emoji users), and better reflect the pivotal roles women play in the world.

Growing Global Women's Equality Movement

The global women's equality movement is growing, so the time to create these emoji is now. All around the world, gender inequity is a focus. The United Nation's new sustainable development agenda calls for achieving gender equity and empowering all women and girls, and the US Treasury recently announced that Harriet Tubman will grace the front of the next version of the $20 bill (and that other influential women will

be added to the $10 and $5 bills). Not to mention the fact that Hillary Clinton is closing in on becoming the first female presidential candidate at the top of a major-party ticket (and, possibly, the first woman US president).

No matter where you look, women are gaining visibility and recognition as never before. Isn't it time that emoji also reflect the reality that women play a key role in every walk of life and in every profession?

Given the fact that women are the most frequent emoji users, and that they span a wide professional spectrum not yet reflected in current emoji, we want to help address this pressing matter of equality.

We would like to pursue a path to standardize these emoji by EOY '16.

Women and Emoji

For millions of people around the world, emoji are an important means of communication — and a strong representation of culture. Yet the roles of people in the workplace cannot be communicated with emoji. This is especially true for women.

Young women are the heaviest users of emoji. According to a September, 2015 SocialTimes report by AdWeek, 92% of online consumers use emoji. Of that user base, 78% of women are frequent emoji users, versus 60% of men. Likewise, age breakdowns of the emoji-active user base reveal that 72% of those under 25 are frequent emoji users, and 77% of users aged 25 - 29 are frequent users. Emoji usage begins dropping at age 30 (with frequent usage dropping to 65% for ages 30-35, and 60% for people over 35.) The nexus of female users and young users reveals that women under 30 are most the frequent emoji users by far.

Given that women are more likely to use emoji at work while communicating with peers (CNBC), it's not surprising that women and men are increasingly vocal about the need for more accurate female representation in emoji professions.

A few of the many articles about this growing movement include:

- *The New York Times* (03/13/16): *Emoji Feminism*
- Mic.com (12/23/15): *Hey, Unicode, It's About Damn Time We Had Some Emojis for Professional Women*
- CNN.com (03/02/16): *Are female emojis sexist and harmful to girls?*

Earlier this year, Always—one of Procter & Gamble's major brands—released an emoji-centric facet of its groundbreaking "Like a Girl" campaign. The resulting Always

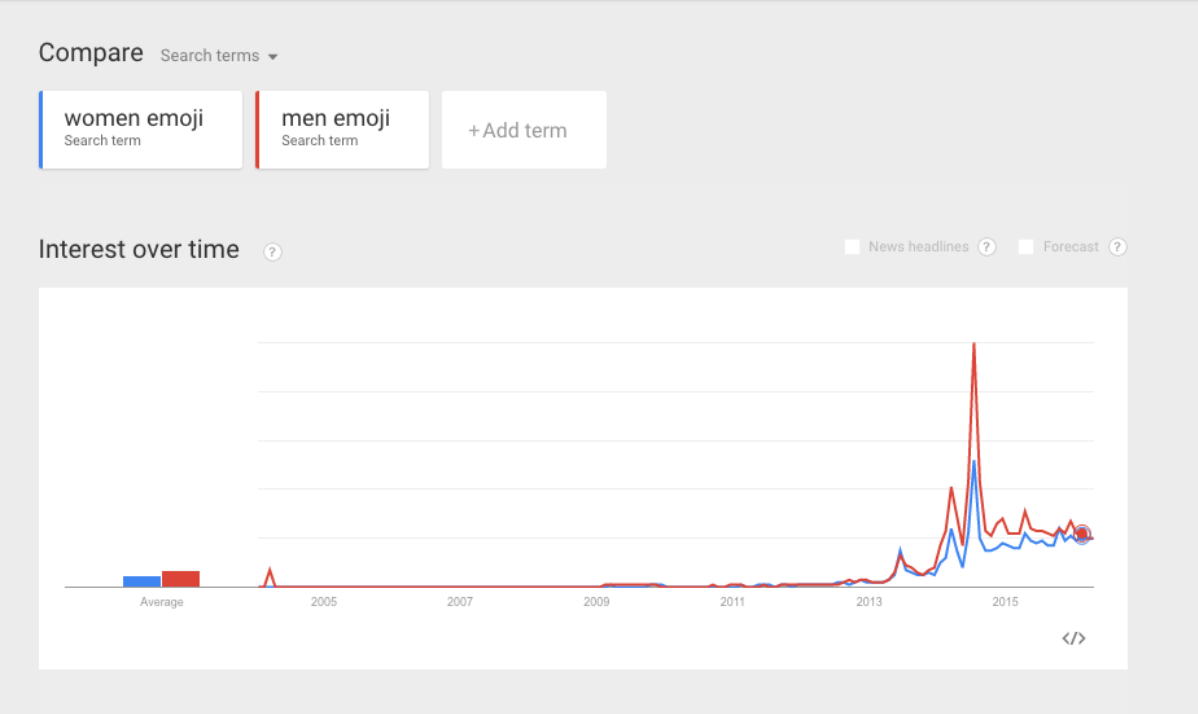
#LikeAGirl - Girl Emojis video received over 18 million views and the Internet exploded with calls for more representative female emoji.

Michelle Obama even responded to the video by posting a Tweet requesting the creation of a "girl studying emoji" to help empower girls around the world. Her message was liked over 11,000 times and retweeted over 3,800 times.

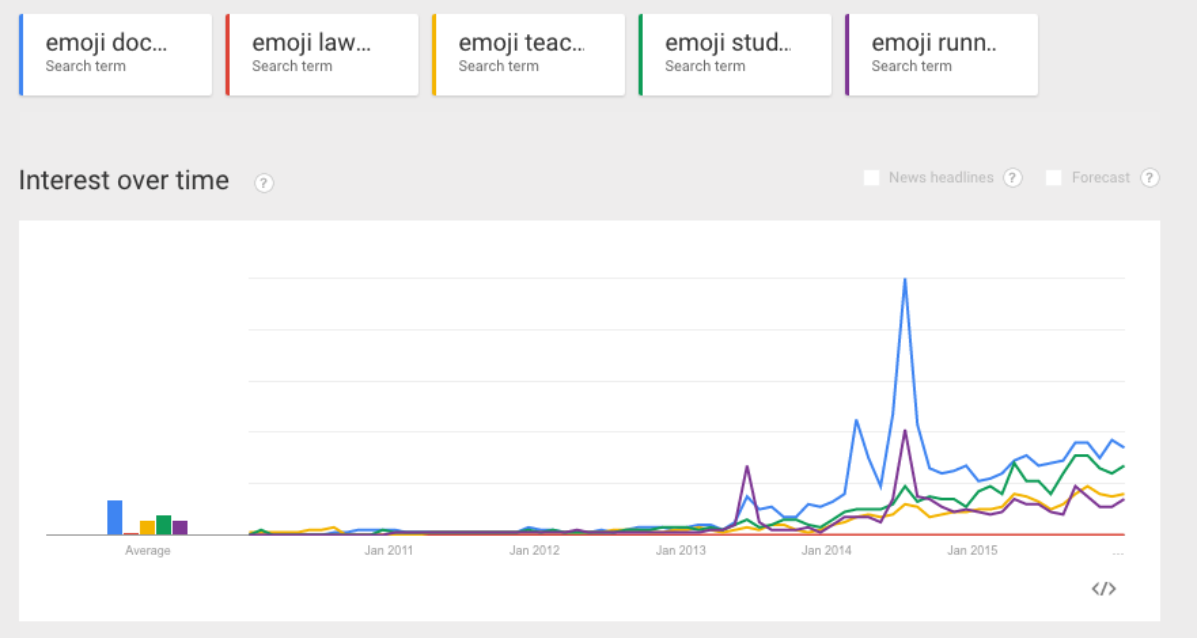
In a related press release dated March 2, 2016, Always noted, "Data from the most recent *Always Confidence & Puberty Survey* shows that more than half of girls surveyed (54%) feel that female emojis are stereotypical, and 75% of girls would like to see female emojis portrayed more progressively, including professional female emoji options."

The press release also points out that, "As the first truly global language, emojis are relied upon in daily social communication, especially among girls, who send over a billion emojis every day." (Digiday)

Emoji Search Trends



People search for women and men emoji with nearly the same frequency



Profession emoji are searched more frequently than the runner emoji

Profession Selection Process

In order to determine an initial set of professions that would represent women well, we aggregated information from three main sources:

1. **Sectors:** Top-level categories that cover the main global sectors of the workforce.
    a. Bureau of Labor Statistics
    b. Agro, Industry, and Services Breakdown
    c. ILO: Sector Trends
2. **Jobs and Growth**: An accumulation of information featuring labor growth areas, global popularity, and gender specific studies.
    a. Business Insider: 20 Jobs Dominated By Women
    b. Forbes: Professions Ruled By Women
    c. BLS + Fastest Growing
    d. US Department of Labor
    e. US News and World Report
    f. PMI
    g. Global Data/ Nation Master
3. **Media and Culture:** Popular and influential campaigns, aspirational representation and trends. Given all the public attention and push to further women in Science, Technology, Engineering and Math (STEM) fields (see below), we believe it's important for emoji to represent these professions.

Initiatives for women in STEM include:

- White House Office of Science and Technology Policy
- Girls Who Code
- 7 Organizations Working to Promote Women in STEM

To make our final selection, we looked at the primary, secondary, and tertiary categories that compose global GDP—Agriculture, Industry and Services—and further broke them down categorically based on global popularity, growth, and overall representation. We additionally added in concepts from popular media campaigns such as #likeagirl, global influencers, and the ongoing support to promote women in STEM. The final determination of the new emoji set was a combination of these above data categories.

From the primary sector we selected **farming**, for the secondary sector, we chose a representation of i**ndustry** and **manufacturing**, and for the tertiary sector, we have included **healthcare**, **technology**, **business** representation (lawyer, financial worker, etc), **education**, **food service,** and of course, an aspirational **rockstar**.

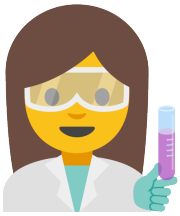
Proposed Emoji

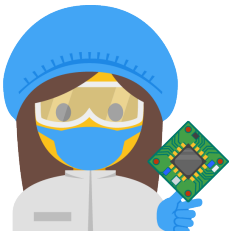
Based on the profession selection process outlined above, we propose the addition of 13 new female emoji and their male counterparts. We believe this number allows us to represent a wide variety of professions without introducing too much complexity to the implementation.

Given the urgency to improve the representation of women in emoji, we recommend standardizing these characters as quickly as possible. See “Emoji Implementation” section below.

Proposed Emoji List

Industry	Sample Emoji	Proposed ZWJ sequence (See “Emoji Implementation” section for other options)	Description
Business		**Woman**: [U+1F469] + [U+1F4BC] **Man**:	Office worker, accountant, banker, manager, financial adviser, tax preparer, clerk

		👨 + 💼 [U+1F468] + [U+1F4BC]	
Healthcare		**Woman**: 👩 + ⚕ [U+1F469] + [U+2695] **Man**: 👨 + ⚕ [U+1F468] + [U+2695]	Doctor, physician, MD
Healthcare		**Woman**: 👩 + 🏥 [U+1F469] + [U+1F3E5] **Man**: 👨 + 🏥 [U+1F468] + [U+1F3E5]	Nurses, dentist, anesthesiologist, radiologist
Science		**Woman**: 👩 + 🔬 [U+1F469] + [U+1F52C] **Man**: 👨 + 🔬 [U+1F468] + [U+1F52C]	Scientist, chemist, lab technician
Education		**Woman**: 👩 + 🎓 [U+1F469] + [U+1F393] **Man**: 👨 + 🎓 [U+1F468] + [U+1F393]	Graduate

Technology		**Woman**: 👩 + 💻 [U+1F469] + [U+1F4BB] **Man**: 👨 + 💻 [U+1F468] + [U+1F4BB]	Software engineer, person coding, working on laptop
Industry		**Woman**: 👩 + 🏭 [U+1F469] + [U+1F3ED] **Man**: 👨 + 🏭 [U+1F468] + [U+1F3ED]	Factory worker, metallurgical worker, mechanic
Industry		**Woman**: 👩 + ⚡ [U+1F469] + [U+26A1] **Man**: 👨 + ⚡ [U+1F468] + [U+26A1]	High tech industry worker, assembly line worker
Industry		**Woman**: 👩 + 🔧 [U+1F469] + [U+1F527] **Man**: 👨 + 🔧 [U+1F468] + [U+1F527]	Mechanic, repair person, plumber, handy person

Farming		**Woman**: 👩 + 🚜 [U+1F469] + [U+1F69C] **Man**: 👨 + 🚜 [U+1F468] + [U+1F69C]	Farmer
Food service		**Woman**: 👩 + 🍳 [U+1F469] + [U+1F373] **Man**: 👨 + 🍳 [U+1F468] + [U+1F373]	Chef, cook
Education		**Woman**: 👩 + 🏫 [U+1F469] + [U+1F3EB] **Man**: 👨 + 🏫 [U+1F468] + [U+1F3EB]	Teacher, professor
Music		**Woman**: 👩 + 🤘 [U+1F469] + [U+1F918] **Man**: 👨 + 🤘 [U+1F468] + [U+1F918]	Rocker, rockstar

Emoji Implementation

We see 3 potential paths to implement the emoji list above.
Note: Our preferred path is to use ZWJ sequences as they can be standardized faster than characters and are a well understood mechanism.

A. Use ZWJ sequences for these professions [recommended]

- To encourage cross-platform compatibility of these new emoji ZWJ sequences, we request that they be incorporated into http://www.unicode.org/Public/emoji/3.0/emoji-zwj-sequences.txt
- **Advantages:**
  i. No need to encode new characters
  ii. Faster path to public availability
- **Disadvantages:**
  i. Some sequences do not preserve physical meaning (i.e.: no glyph for “electronics” or computer chip) and thus the fallbacks could be confusing (i.e.: “high tech industry worker” could be read as “Electrician”)
  ii. Without encoding as characters, less motivation for implementers to support.

B. Encode new characters for each man and woman in a profession

- This is NOT a desired approach
- A total of 26 new characters (13 for men and 13 for women) would need to be encoded to support the professions below.
- **Advantages:**
  i. High adoption rate from implementers as the characters would become standardized
  ii. Lower effort to implement, particularly for those systems that don’t have good support for ZWJs
- **Disadvantages:**
  i. Need to wait for Unicode 10 (Q2 2017)

C. Tag Sequences

- This is NOT a desired approach for professions & gender
- **Advantages**:
  i. Fast path to public availability
  ii. No need to encode new characters
- **Disadvantages:**
  i. Inadequate fallback strategy. Profession meaning would be completely lost, gender could be lost too if the base character is always the same.
  ii. No implementer support of tags yet, depends on TR52 being finalized and adopted.

A Note on Gender Spectrum and Neutrality

We recognize the importance of having an inclusive representation of all people in emoji, whether they identify with a specific gender or not. We believe an egalitarian, sensitive, and compelling representation of gender in emoji is extremely important.

However, as this is not the focus of this effort, we suggest decoupling the gender-neutral representation of emoji from this proposal. We would encourage other members of Unicode to join us in creating a system of emoji design that can accommodate a broader gender spectrum.