Ongoing Rise and Fall of Tattoos

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Professor of Dermatology
Northwestern University, Chicago
I have no relevant conflicts of interest.
I do not have a tattoo
Around the world, people get tattoos for different reasons, not just adornment.

Contemporary tattooing continues to be vibrantly practiced around the world.

Over time, tattooing practices have mixed and moved across the world.
For thousands of years, tattooing has been part of humanity’s shared heritage. Repressed in Europe, it flourished in Asia, Oceania and the Americas as a form of art, social affiliation, and spirituality. When Western travelers in the 15th century brought the practice home to Europe, tattooing lost much of the symbolic and cultural significance it once held and became an act of individualism associated with the fringes of society. Since then tattooing has continued to change.
Yupik figure with chin tattoos

The Arctic
St. Lawrence island, Alaska
Makonde figure portraying a keloid tattoo

(Scarification and pigmentation)

East Africa
You shall not make any cuttings in your flesh on account of the dead or tattoo any marks upon you: I am the Lord

Holiness Code, Leviticus 19:28

Ye shall not cut yourselves nor make any baldness between the eyes for the dead

Deuteronomy 14:1

550-400 B.C.

These admonitions may have been motivated by marks on the bodies of Israelites at the time.
China

Mentioned 350 years ago

Drung culture
- rites of passage
- Tribal identifiers

© Michael Laukien
Polynesian Islands
Polynesia

Proud parents: Island of Nuku Hiva, Tahiti Shores

Alexandra Marie Colin
1798 - 1875

Oil painting
Tattooing

- Tahitian word: “tataau” translates as “the results of tapping.”
- Captain Cook’s first voyage 1769-1791.
- Maoris: the “moko” was a sign of status as well as affiliation.
New Zealand

Maori sculpture portraying *ta moko* traditional tattooing

Chicago Field Museum collections
New Zealand

Tattooed silicone torso

Mark Kopua
A PRINCE OF THE MARQUEESAS.
AUSTRALIA

Tropic of Capricorn (23°27')

Perth

Great Australian Bight

Tasmania

Canberra

Sydney

Canberra

Newcastle

Lord Howe Island (AUSTL.)

Melbourne

Adelaide

Gulf of Carpentaria

Alice Springs

Darwin

Kupang

Christmast Island (AUSTL.)

Ashmore and Cartier Islands (AUSTL.)

Timor Sea

Moresby

Coral Sea Islands (AUSTL.)

New Caledonia (FRANCE)

Noumea

Brisbane

Cairns

Coral Sea

Darwin

Gulf of Carpentaria

Norfolk Island (AUSTL.)

Vanuatu

Port-Vila

Suva

Nuku'alofa

Wallis and Futuna

Mata-Utu (FRANCE)

New Zealand

Wellington

Christchurch

CHATHAM ISLANDS (N.Z.)

Auckland

AUCKLAND ISLANDS (N.Z.)

SNARES ISLANDS (N.Z.)

Bounty Islands (N.Z.)

Antipodes Islands (N.Z.)

Campbell Island (N.Z.)

Macquarie Island (AUSTL.)

Tasman Sea
### Australia

Percentage estimates of tattooed persons

<table>
<thead>
<tr>
<th>Sample in Australia</th>
<th>Year of Sample</th>
<th>N</th>
<th>Age</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General population representative sample(^{22})</td>
<td>1998</td>
<td>10,340</td>
<td>≥14</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>≡20</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>≡50-60</td>
<td>5</td>
</tr>
<tr>
<td>Australian Study of Health and Relationships, representative sample(^{23})</td>
<td>2001</td>
<td>19,000</td>
<td>16-59</td>
<td>13</td>
</tr>
<tr>
<td>Computer-assisted random digit dialing with a representative sample(^{24})</td>
<td>2004</td>
<td>8656</td>
<td>16-64</td>
<td>15</td>
</tr>
</tbody>
</table>
Thailand

Yonyuk Watchiya, Boxer, Bangkok

©Cedric Arnold

Kad Luang Market, Chiangmai

© Dow Waskiksiri
98-year old master tattooer Whang-Od of Kalinga, Philippines
Kalinga traditions and new practitioners, Philippines
Contemporary tattoo by Horiyoshi III, a master of irezumi

Martin Haldik
## Taiwan

Percentage estimates of tattooed adolescents

<table>
<thead>
<tr>
<th>Sample in Asia</th>
<th>Year of Sample</th>
<th>N</th>
<th>Age</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample of high school students in Taiwan(^{29})</td>
<td>2004</td>
<td>9755</td>
<td>13-18</td>
<td>1</td>
</tr>
<tr>
<td>Sample of juvenile detainees in Taiwan(^{30})</td>
<td>2012</td>
<td>973</td>
<td>Mean=17</td>
<td>52</td>
</tr>
</tbody>
</table>
Technology of Tattooing

Whether they used knives or needles, made out of shark teeth, cactus spines or metal, tattooists across cultures and time have employed a common method: puncture the skin and deposit pigment.

> Yupik tattooists used lampblack mixed with urine as their ink’s base.
> Roman Catholic women in Bosnia-Herzegovina used soot combined with breast milk.
> Maori tattooists used soot from charred pine wood mixed with water.

Modern electric tattoo needles and synthetic pigments now allow tattooists to create designs more intricate and colorful than ever before.
Tattooing in the West

Carried on the skin of sailors and adventurers, tattooing made its way to Europe. As it spread it continued to diversify. By the end of the 19th century, faster transportation – and the invention of the electric tattoo machine – helped artists in Europe, Asia and North America exchange ideas and techniques at a more rapid pace. In the mid-20th century tattoo artists began to gather in clubs – first in 1953 in the UK. An international tattooing convention held in 1976 in Texas sparked a global resurgence of tattooing.
17th century stamp to draw a tattoo design commemorating a pilgrimage to Jerusalem
Germany

Percentage estimates of tattooed persons

<table>
<thead>
<tr>
<th>Sample in Germany</th>
<th>Year of Sample</th>
<th>N</th>
<th>Age</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General population representative sample (^{26,27})</td>
<td>Accepted for publication 2005</td>
<td>2043</td>
<td>14-93</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14-44</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25-34</td>
<td></td>
</tr>
<tr>
<td>Community snowball-sampling survey of southern German-speaking area of Central Europe (^{28})</td>
<td>2010</td>
<td>441</td>
<td>16-30+</td>
<td>15</td>
</tr>
</tbody>
</table>
## Italy

Percentage estimates of adolescents with tattoos

<table>
<thead>
<tr>
<th>Sample in Italy</th>
<th>Year of Sample</th>
<th>N</th>
<th>Age</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School children (Eurispes)</td>
<td>2002</td>
<td>3800</td>
<td>12-18</td>
<td>6.6</td>
</tr>
<tr>
<td>Representative sample of high school students in</td>
<td>2004</td>
<td>820</td>
<td>15-19</td>
<td>8.5</td>
</tr>
<tr>
<td>Cagliari&lt;sup&gt;25&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>15-16</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>17-18</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>≥19</td>
<td>15.8</td>
</tr>
</tbody>
</table>
Tattooed silicone torso
Philip Leu, Switzerland
Göteborg, Sweden
Tattoo: Jonas Nyberg
Photo: Zoé Forget

Tattoo design on linen
England
Alex Binnie 2013
Armenian woman with identifying tattoos: 1919

©Underwood and Underwood/Corbis

Tattooed in Aushwitz with Israeli grandson

Photo: Uriel Sinai 2012
Blood-types tattoos

Northwest Indiana industrial corridor long considered terror target.

Elementary school children were tattooed in 1952: the height of the Cold War, during the Korean War.
South America

Percentage estimates of tattooed adolescents

<table>
<thead>
<tr>
<th>Sample in South America</th>
<th>Year of Sample</th>
<th>N</th>
<th>Age</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Representative sample of adolescents in two public schools - Brazil(^{31})</td>
<td>2003</td>
<td>664</td>
<td>12-19 Mean 15.2</td>
<td>3.2</td>
</tr>
</tbody>
</table>
Canada

Percentage estimates of tattooed adolescents

<table>
<thead>
<tr>
<th>Canada Sample</th>
<th>Year of Sample</th>
<th>N</th>
<th>Age</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Representative sample of high school students in Quebec\textsuperscript{20,21}</td>
<td>2002</td>
<td>2145</td>
<td>12-18</td>
<td>8</td>
</tr>
</tbody>
</table>
“flash” for an itinerant North African tattooist
A Berber woman
Algeria, 1960s

An Egyptian Cross
Tattoo and Haircut

Under the El on the Bowery in New York

(Skid Row) 1932

Reginal Marsh
# U.S.A.

## Percentage estimates of tattooed persons

<table>
<thead>
<tr>
<th>United States of America Sample</th>
<th>Year of Sample</th>
<th>N</th>
<th>Age (years)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nationally representative school-based</strong>¹</td>
<td>1995</td>
<td>5837</td>
<td>11-13</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14-16</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>17-21</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11-21</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>A cross-sectional convenient sample of adolescents</strong>²</td>
<td>1996</td>
<td>2101</td>
<td>12-18</td>
<td>10</td>
</tr>
<tr>
<td><strong>Patients Presenting at an Emergency Department</strong>³</td>
<td>1999</td>
<td>294</td>
<td>16-35</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>36-50</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>51-65</td>
<td>5</td>
</tr>
<tr>
<td>United States of America Sample</td>
<td>Year of Sample</td>
<td>N</td>
<td>Age (years)</td>
<td>Total (%)</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>----------------</td>
<td>-----</td>
<td>-------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Cohort of military recruits random survey&lt;sup&gt;4&lt;/sup&gt;</td>
<td>1999</td>
<td>499</td>
<td>Median=20</td>
<td>28</td>
</tr>
<tr>
<td>Sample survey of college volunteers&lt;sup&gt;5&lt;/sup&gt;</td>
<td>1999</td>
<td>235</td>
<td>Mean=19</td>
<td>12</td>
</tr>
<tr>
<td>Basic recruits and advanced individual training students at one military installation&lt;sup&gt;6&lt;/sup&gt;</td>
<td>2000</td>
<td>1,835</td>
<td>18-30</td>
<td>36</td>
</tr>
</tbody>
</table>
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Percentage estimates of tattooed persons

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<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>College students a convenient sample</td>
<td>2001</td>
<td>302</td>
<td>18-49</td>
<td>19</td>
</tr>
<tr>
<td>Randomly selected undergraduates at Pace University</td>
<td>2001</td>
<td>254</td>
<td>Mean=21</td>
<td>23</td>
</tr>
<tr>
<td>Adolescent clinic for dependent children of military personnel</td>
<td>2001</td>
<td>484</td>
<td>12-22</td>
<td>13.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>≤15</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>≥18</td>
<td>26.3</td>
</tr>
<tr>
<td>College students in a large state-supported university Southwest region</td>
<td>2002</td>
<td>520</td>
<td>18-22</td>
<td>19</td>
</tr>
</tbody>
</table>
U.S.A.
Percentage estimates of tattooed persons

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</tr>
</thead>
<tbody>
<tr>
<td>Nationally representative online (Harris Poll)</td>
<td>2003</td>
<td>2,215</td>
<td>18-≤70</td>
<td>16</td>
</tr>
<tr>
<td>General Population representative sample</td>
<td>2004</td>
<td>500</td>
<td>18-50</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18-29</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30-40</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>41-50</td>
<td>15</td>
</tr>
<tr>
<td>Autopsy records from the New Mexico Office of the Medical Investigator</td>
<td>2002-2005</td>
<td>3430</td>
<td>18-100</td>
<td>40</td>
</tr>
<tr>
<td>Sequential voluntary survey among college students</td>
<td>2001-2006</td>
<td>1104</td>
<td>18-22</td>
<td>23</td>
</tr>
</tbody>
</table>
### Percentage estimates of tattooed persons in the United States of America

<table>
<thead>
<tr>
<th>United States of America Sample</th>
<th>Year of Sample</th>
<th>N</th>
<th>Age (years)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Randomly selected undergraduates at Pace University(^{15})</td>
<td>2006</td>
<td>661</td>
<td>Mean 21</td>
<td>21.8</td>
</tr>
<tr>
<td>General Population representative on phone(^{16})</td>
<td>2006</td>
<td>1501</td>
<td>18-25, 26-40, 41-64</td>
<td>36, 40, 10</td>
</tr>
<tr>
<td>Nationally representative online (Harris Poll)(^{17})</td>
<td>2008</td>
<td>2302</td>
<td>18-64</td>
<td>14</td>
</tr>
</tbody>
</table>
# U.S.A.

Percentage estimates of tattooed persons

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<thead>
<tr>
<th>United States of America Sample</th>
<th>Year of Sample</th>
<th>N</th>
<th>Age (years)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millennials landline and cellular telephone Pew Research Center ¹⁷</td>
<td>2010</td>
<td>2020</td>
<td>18-29</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30-45</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>46-64</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>65+</td>
<td>6</td>
</tr>
<tr>
<td>Midwestern University students in physical education and health classes ¹⁸</td>
<td>2012</td>
<td>998</td>
<td>18-22</td>
<td>30</td>
</tr>
<tr>
<td>Nationally representative online (Harris Poll) ¹⁹</td>
<td>2015</td>
<td>2,225</td>
<td>18-65+</td>
<td>29</td>
</tr>
</tbody>
</table>
Percentage estimates of tattooed persons

29%
The 8th Annual Chicago Tattoo Arts Convention
March 17th - 19th 2017  Donald E Stephens Convention Center

490 Booths
800 Tattoo artists
The influences that have always shaped tattooing continue to do so today. Some contemporary artists draw on older visual traditions developed in Asia, Oceania and the Americas. Others are pushing the medium in a new direction with a vocabulary of pixels, typography, abstract designs and diagrams. Accurate prevalence data is not really available but, as we look across the world the Art of the Tattoo is alive and well but growing in depth and innovation. No longer repressed, tattooing flourishes in many countries in a variety of forms, aesthetics, symbols and meanings.
I thank the Field Museum of Chicago and, my assistant, Dr. Kelsey Orrell, for their special contributions to this presentation.
REFERENCES

7. Forbes GB. College students with tattoos and piercings: motives, family experiences, personality factors, and perception by others. Psychological reports. 2001;89(3):774-786.