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# What can tiny, transparent GIFs from the 1990's teach us about the future of access and use of web archives?

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# The Transparent GIF



Olia Lialina (2013). [http://www.collection.evan-roth.com/olia\\_lialina/clear.gif](http://www.collection.evan-roth.com/olia_lialina/clear.gif)

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“The hacks I've espoused, especially the single-pixel GIF, and using frames and tables to do layout, are the duct tape of the Web.”

- David Siegel, *The Web Is Ruined and I Ruined It*, 1997

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## GIFs from Lialina's *clear.gif* Exhibition

<http://www.geocities.com/clipart/pbi/c.gif>

<http://pic.geocities.com/images/pixel.gif>

<http://www.google.com/clear.gif>

[https://killersites.com/killerSites/resources/dot\\_clear.gif](https://killersites.com/killerSites/resources/dot_clear.gif)

<http://visit.geocities.yahoo.com/visit.gif>

<http://blingee.com/images/spaceball.gif>

<http://www-cdr.stanford.edu/~petrie/blank.gif>

[http://img.artlebedev.ru/;-\)/n.gif](http://img.artlebedev.ru/;-)/n.gif)

<https://mail.google.com/mail/images/cleardot.gif>

<http://www.google.com/images/cleardot.gif>

# Earliest captures / Computing a unique hash

URL	Earliest LC	Earliest IA	Sha-1
<a href="http://www.geocities.com/clipart/pbi/c.gif">http://www.geocities.com/clipart/pbi/c.gif</a>	<u>2/8/02</u>	10/13/99	356F32DA60A0387E36ED94B0CB3D0A0394D90B60
<a href="http://pic.geocities.com/images/pixel.gif">http://pic.geocities.com/images/pixel.gif</a>	<u>2/23/02</u>	3/2/00	328E472721A93345801ED5533240EAC2D1F8498C
<a href="http://www.google.com/images/cleardot.gif">http://www.google.com/images/cleardot.gif</a>	<u>7/2/02</u>	<u>5/10/00</u>	56D45F8A17F5078A20AF9962C992CA4678450765
<a href="http://www.google.com/clear.gif">http://www.google.com/clear.gif</a>	<u>2/22/02</u>	8/5/00	317496A096D6C86486A71D4521994BCD171A6BB3
<a href="killersites.com/killerSites/resources/dot_clear.gif">killersites.com/killerSites/resources/dot_clear.gif</a>	<u>8/5/09</u>	6/20/03	328E472721A93345801ED5533240EAC2D1F8498C
<a href="https://mail.google.com/mail/images/cleardot.gif">https://mail.google.com/mail/images/cleardot.gif</a>	<u>1/28/08</u>	<u>4/5/06</u>	56D45F8A17F5078A20AF9962C992CA4678450765
<a href="http://visit.geocities.yahoo.com/visit.gif">http://visit.geocities.yahoo.com/visit.gif</a>	none	7/3/06	FAA81452F0C19B304B89F0086F85A2941A57C32D
<a href="http://blingee.com/images/spaceball.gif">http://blingee.com/images/spaceball.gif</a>	<u>10/3/07</u>	1/18/07	2DAEAA8B5F19F0BC209D976C02BD6ACB51B00B0A
<a href="http://www-cdr.stanford.edu/~petrie/blank.gif">http://www-cdr.stanford.edu/~petrie/blank.gif</a>	<u>6/16/09</u>	6/12/07	9D01CC5DC8E042C0D4AD6CFB8B3AC38E84A5EF9F
<a href="http://img.artlebedev.ru/;-)/n.gif">http://img.artlebedev.ru/;-)/n.gif</a>	none	12/5/13	2DAEAA8B5F19F0BC209D976C02BD6ACB51B00B0A

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<a href="http://www.geocities.com/clipart/pbi/c.gif">http://www.geocities.com/clipart/pbi/c.gif</a>	<u>2/8/02</u>	10/13/99	356F32DA60A0387E36ED94B0CB3D0A0394D90B60
<a href="http://pic.geocities.com/images/pixel.gif">http://pic.geocities.com/images/pixel.gif</a>	<u>2/23/02</u>	3/2/00	328E472721A93345801ED5533240EAC2D1F8498C
<a href="http://www.google.com/images/cleardot.gif">http://www.google.com/images/cleardot.gif</a>	<u>7/2/02</u>	<u>5/10/00</u>	<b>56D45F8A17F5078A20AF9962C992CA4678450765</b>
<a href="http://www.google.com/clear.gif">http://www.google.com/clear.gif</a>	<u>2/22/02</u>	8/5/00	317496A096D6C86486A71D4521994BCD171A6BB3
<a href="killersites.com/killerSites/resources/dot_clear.gif">killersites.com/killerSites/resources/dot_clear.gif</a>	<u>8/5/09</u>	6/20/03	328E472721A93345801ED5533240EAC2D1F8498C
<a href="https://mail.google.com/mail/images/cleardot.gif">https://mail.google.com/mail/images/cleardot.gif</a>	<u>1/28/08</u>	<u>4/5/06</u>	<b>56D45F8A17F5078A20AF9962C992CA4678450765</b>
<a href="http://visit.geocities.yahoo.com/visit.gif">http://visit.geocities.yahoo.com/visit.gif</a>	none	7/3/06	FAA81452F0C19B304B89F0086F85A2941A57C32D
<a href="http://blingee.com/images/spaceball.gif">http://blingee.com/images/spaceball.gif</a>	<u>10/3/07</u>	1/18/07	<b>2DAEAA8B5F19F0BC209D976C02BD6ACB51B00B0A</b>
<a href="http://www-cdr.stanford.edu/~petrie/blank.gif">http://www-cdr.stanford.edu/~petrie/blank.gif</a>	<u>6/16/09</u>	6/12/07	9D01CC5DC8E042C0D4AD6CFB8B3AC38E84A5EF9F
<a href="http://img.artlebedev.ru/;-)/n.gif">http://img.artlebedev.ru/;-)/n.gif</a>	none	12/5/13	<b>2DAEAA8B5F19F0BC209D976C02BD6ACB51B00B0A</b>

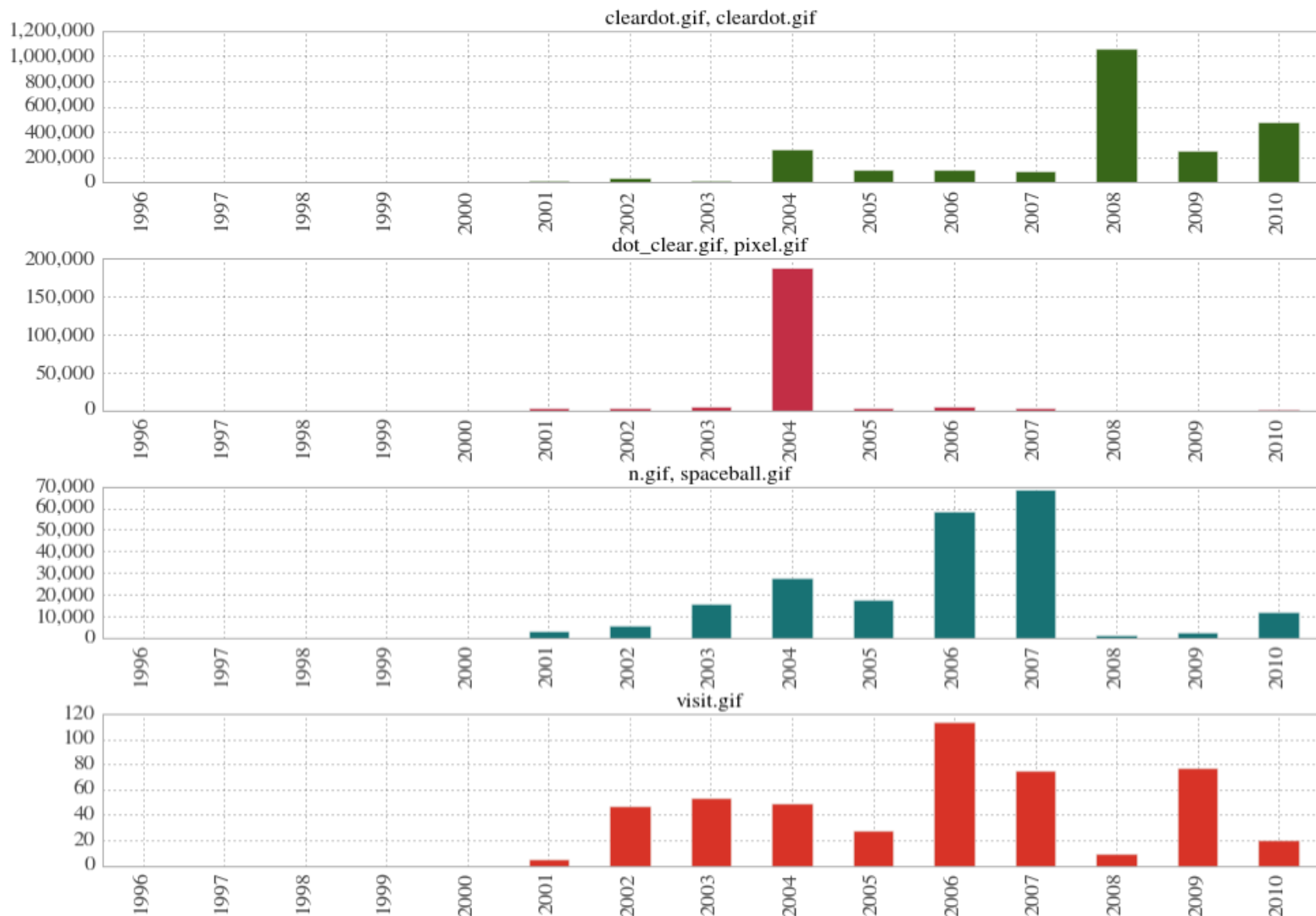
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<a href="http://www.geocities.com/clipart/pbi/c.gif">http://www.geocities.com/clipart/pbi/c.gif</a>	<u>2/8/02</u>	10/13/99	356F32DA60A0387E36ED94B0CB3D0A0394D90B60
<a href="http://pic.geocities.com/images/pixel.gif">http://pic.geocities.com/images/pixel.gif</a>	<u>2/23/02</u>	<b>3/2/00</b>	<b>328E472721A93345801ED5533240EAC2D1F8498C</b>
<a href="http://www.google.com/images/cleardot.gif">http://www.google.com/images/cleardot.gif</a>	<u>7/2/02</u>	<u>5/10/00</u>	56D45F8A17F5078A20AF9962C992CA4678450765
<a href="http://www.google.com/clear.gif">http://www.google.com/clear.gif</a>	<u>2/22/02</u>	8/5/00	317496A096D6C86486A71D4521994BCD171A6BB3
<a href="http://killersites.com/killerSites/resources/dot_clear.gif">killersites.com/killerSites/resources/dot_clear.gif</a>	<u>8/5/09</u>	<b>6/20/03</b>	<b>328E472721A93345801ED5533240EAC2D1F8498C</b>
<a href="https://mail.google.com/mail/images/cleardot.gif">https://mail.google.com/mail/images/cleardot.gif</a>	<u>1/28/08</u>	<u>4/5/06</u>	56D45F8A17F5078A20AF9962C992CA4678450765
<a href="http://visit.geocities.yahoo.com/visit.gif">http://visit.geocities.yahoo.com/visit.gif</a>	none	7/3/06	FAA81452F0C19B304B89F0086F85A2941A57C32D
<a href="http://blingee.com/images/spaceball.gif">http://blingee.com/images/spaceball.gif</a>	<u>10/3/07</u>	1/18/07	2DAEAA8B5F19F0BC209D976C02BD6ACB51B00B0A
<a href="http://www-cdr.stanford.edu/~petrie/blank.gif">http://www-cdr.stanford.edu/~petrie/blank.gif</a>	<u>6/16/09</u>	6/12/07	9D01CC5DC8E042C0D4AD6CFB8B3AC38E84A5EF9F
<a href="http://img.artlebedev.ru/;-)/n.gif">http://img.artlebedev.ru/;-)/n.gif</a>	none	12/5/13	2DAEAA8B5F19F0BC209D976C02BD6ACB51B00B0A

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<a href="https://mail.google.com/mail/images/cleardot.gif">https://mail.google.com/mail/images/cleardot.gif</a>	<u>1/28/08</u>	<u>4/5/06</u>	56D45F8A17F5078A20AF9962C992CA4678450765
<a href="http://visit.geocities.yahoo.com/visit.gif">http://visit.geocities.yahoo.com/visit.gif</a>	none	7/3/06	FAA81452F0C19B304B89F0086F85A2941A57C32D
<a href="http://blingee.com/images/spaceball.gif">http://blingee.com/images/spaceball.gif</a>	<u>10/3/07</u>	<u>1/18/07</u>	<b>2DAEAA8B5F19F0BC209D976C02BD6ACB51B00B0A</b>
<a href="http://www-cdr.stanford.edu/~petrie/blank.gif">http://www-cdr.stanford.edu/~petrie/blank.gif</a>	<u>6/16/09</u>	6/12/07	9D01CC5DC8E042C0D4AD6CFB8B3AC38E84A5EF9F
<a href="http://img.artlebedev.ru/;-)/n.gif">http://img.artlebedev.ru/;-)/n.gif</a>	none	<u>12/5/13</u>	<b>2DAEAA8B5F19F0BC209D976C02BD6ACB51B00B0A</b>

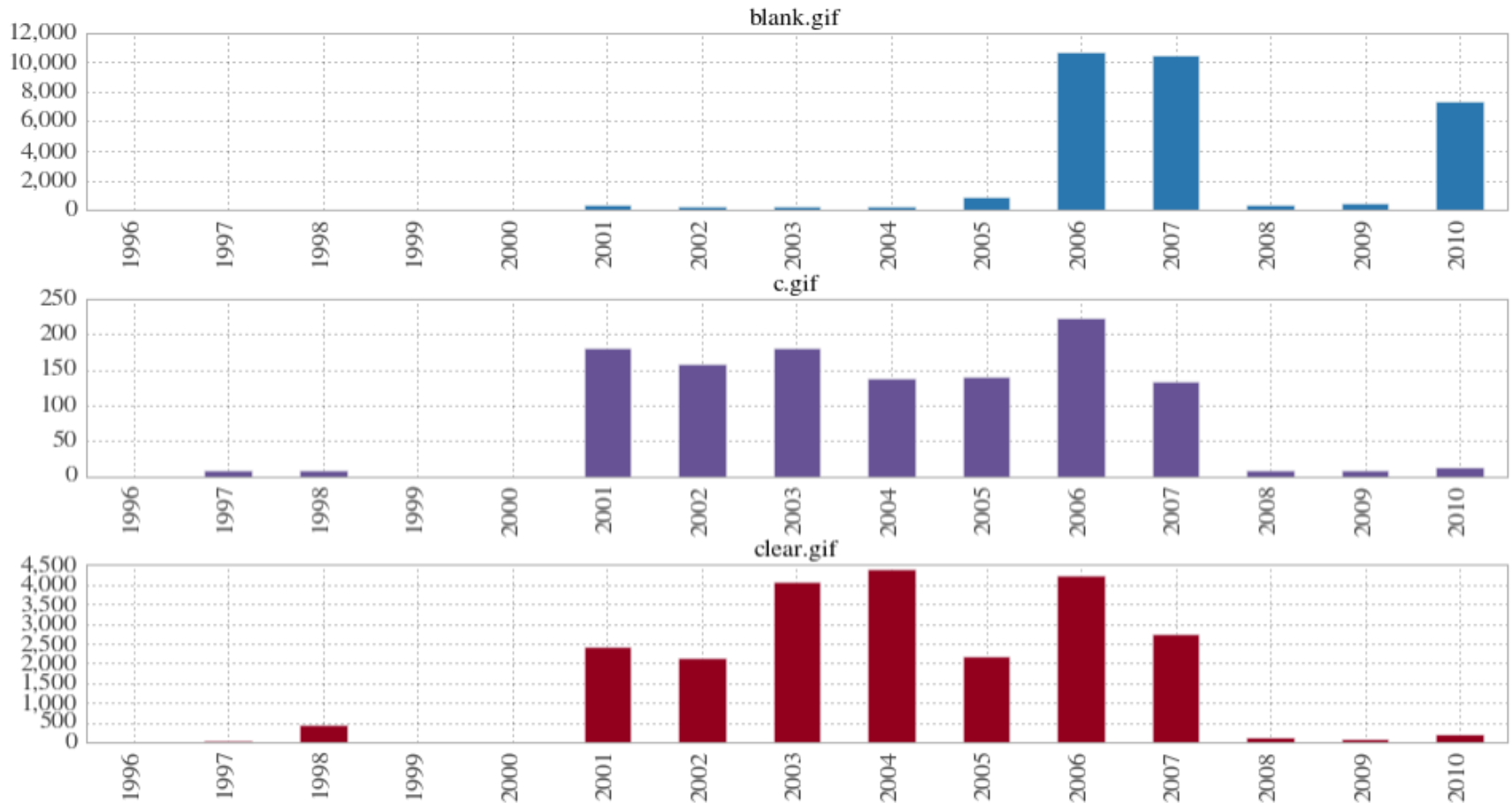


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<a href="http://pic.geocities.com/images/pixel.gif">http://pic.geocities.com/images/pixel.gif</a>	<u>2/23/02</u>	3/2/00	328E472721A93345801ED5533240EAC2D1F8498C
<a href="http://www.google.com/images/cleardot.gif">http://www.google.com/images/cleardot.gif</a>	<u>7/2/02</u>	<u>5/10/00</u>	56D45F8A17F5078A20AF9962C992CA4678450765
<a href="http://www.google.com/clear.gif">http://www.google.com/clear.gif</a>	<u>2/22/02</u>	8/5/00	317496A096D6C86486A71D4521994BCD171A6BB3
<a href="killersites.com/killerSites/resources/dot_clear.gif">killersites.com/killerSites/resources/dot_clear.gif</a>	<u>8/5/09</u>	6/20/03	328E472721A93345801ED5533240EAC2D1F8498C
<a href="https://mail.google.com/mail/images/cleardot.gif">https://mail.google.com/mail/images/cleardot.gif</a>	<u>1/28/08</u>	<u>4/5/06</u>	56D45F8A17F5078A20AF9962C992CA4678450765
<a href="http://visit.geocities.yahoo.com/visit.gif">http://visit.geocities.yahoo.com/visit.gif</a>	none	7/3/06	FAA81452F0C19B304B89F0086F85A2941A57C32D
<a href="http://blingee.com/images/spaceball.gif">http://blingee.com/images/spaceball.gif</a>	<u>10/3/07</u>	1/18/07	2DAEAA8B5F19F0BC209D976C02BD6ACB51B00B0A
<a href="http://www-cdr.stanford.edu/~petrie/blank.gif">http://www-cdr.stanford.edu/~petrie/blank.gif</a>	<u>6/16/09</u>	6/12/07	9D01CC5DC8E042C0D4AD6CFB8B3AC38E84A5EF9F
<a href="http://img.artlebedev.ru/;-)/n.gif">http://img.artlebedev.ru/;-)/n.gif</a>	none	12/5/13	2DAEAA8B5F19F0BC209D976C02BD6ACB51B00B0A

# Trends across UKWA Corpus (1996-2010) - Pt. 1



# Trends across UKWA Corpus (1996-2010) - Pt. 2



<http://nbviewer.jupyter.org/github/ukwa/halfife/blob/master/clear/tracing-clear.gif.ipynb>

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## So, what have these GIFs taught us?

- The future of the study of the web and the future of collecting the web are intertwined
  - \* As is true for what has already been collected
- Web archives as data *corpora*
  - \* Inter-institutional duplication is okay
- Characterizing files as a mode of access
  - \* There are many ways of categorizing similarity, this is simply one approach
  - \* Lends itself to non-consumptive data sets & analysis
- Implications for digital library infrastructure + scale
  - \* Points to work such as Archives Unleashed + UKWA

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Thank you!

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