Expanding Usability Studies of Complex Websites to Include Posthuman Users

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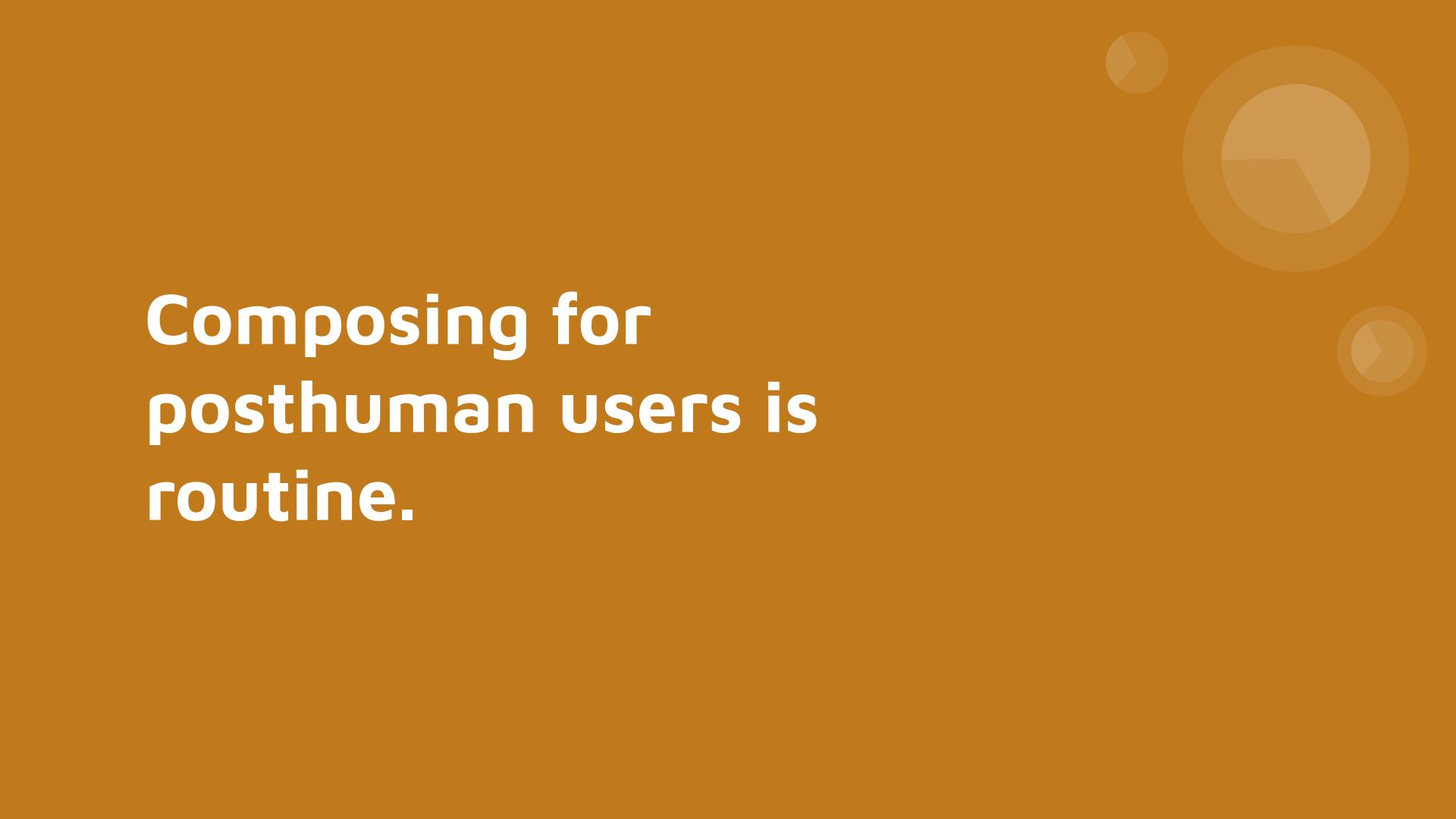
Composing for posthuman users is routine.

Defining 'posthuman' user through locus of agency

"New materialist theories of agency challenge notions of the autonomous human
rhetor at the helm of a rhetorical act" (Johnson & Johnson, 2016).

Johnson, N.R., & Johnson, M. A. (2016). Glitch as infrastructural monster. *Enculturation*. http://enculturation.net

"Agency does not belong to any single actor, whether human or nonhuman; rather agency is the product of the relationship between actors and exists only at their point of contact. These points of contact … are rhetorical acts" (McIntyre, 2015, p. 12, quoted in Johnson & Johnson, 2016).

McIntyre, M. M. (2015). Relational agency, networked technology, and the social media aftermath of the Boston Marathon bombing (Dissertation). University of South Florida.

Designing websites for search algorithms

"Search engine optimization (SEO) is the process of **optimizing your online content** so that a search engine likes to show it as a top result for searches of a certain keyword…. SEO is the **magic you have to work** on your article in order to make Google very likely to include your post as one of the top results whenever someone searches for that keyword" (emphasis added).

Neil Patel, "SEO Made Simple: A Step-by-Step Guide for 2020" https://neilpatel.com/what-is-seo/

Coding websites for analytics platforms

```
<!-- Google Tag Manager (spcs) -->
<script>
    (function(w,d,s,l,i){w[l]=w[l]||[];w[l].push({'gtm.start':
    new Date().getTime(),event:'gtm.js'});var f=d.getElementsByTagName(s)[0],
    j=d.createElement(s),dl=l!='dataLayer'?'&l='+l:'';j.async=true;j.src=
    'https://www.googletagmanager.com/gtm.js?id='+i+dl;f.parentNode.insertBefore(j,f);
    })(window,document,'script','dataLayer','GTM-K3JGWCZ');
</script>
<!-- End Google Tag Manager (spcs) -->

<!-- Google Tag Manager - (rollup) -->
<script>
    (function(w,d,s,l,i){w[l]=w[l]||[];w[l].push({'gtm.start':
    new Date().getTime(),event:'gtm.js'});var f=d.getElementsByTagName(s)[0],
    j=d.createElement(s),dl=l!='dataLayer'?'&l='+l:'';j.async=true;j.src=
    'https://www.googletagmanager.com/gtm.js?id='+i+dl;f.parentNode.insertBefore(j,f);
    })(window,document,'script','dataLayer','GTM-T45RP6M');
</script>
<!-- End Google Tag Manager - (rollup) -->
```

view-source:https://spcs.richmond.edu/

Encoding websites for online advertisers

```
<script>(function(w,d,t,r,u){var
f,n,i;w[u]=w[u]||[],f=function(){var
o={ti:"5283290"};o.q=w[u],w[u]=new
UET(o),w[u].push("pageLoad")},n=d.crea
teElement(t),n.src=r,n.async=1,n.onloa
d=n.onreadystatechange=function(){var
s=this.readyState;s&&s!=="loaded"&&s!=
="complete"||(f(),n.onload=n.onreadyst
atechange=null)},i=d.getElementsByTagN
ame(t)[0],i.parentNode.insertBefore(n,
i)})(window,document,"script","//bat.b
ing.com/bat.js","uetq");</script>
```

```
<script>
  !function(f,b,e,v,n,t,s)
{if(f.fbq)return;n=f.fbq=function(){n.callMethod?
n.callMethod.apply(n,arguments):n.queue.push(argumen
ts)};
if(!f._fbq)f._fbq=n;n.push=n;n.loaded=!0;n.version='
2.0';
  n.queue=[];t=b.createElement(e);t.async=!0;
  t.src=v;s=b.getElementsByTagName(e)[0];
  s.parentNode.insertBefore(t,s)}(window,
document,'script',
'https://connect.facebook.net/en_US/fbevents.js');
  fbq('init', '1423519397894092');
  fbq('track', 'PageView');
</script>
<noscript><img height="1" width="1"
style="display:none"
src="https://www.facebook.com/tr?id=1423519397894092
&ev=PageView&noscript=1"
/></noscript>
```

Key question: Does it make sense to measure and study posthuman user experience?

Does it make sense to measure & study posthuman user experience?

If so, *when* and *how* should posthuman user experience be measured and studied?

If not, *how* do we *account* for the algorithm-centered agency of nonhuman agents engaged in online search and advertising platforms?

Methods for testing human UX
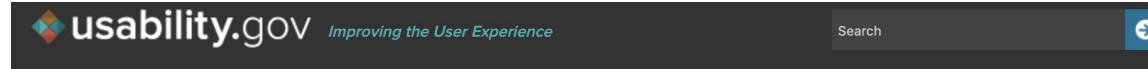
Proposing methods for studying nonhuman user experience

Study SERPS to measure search algorithm use of SEO

A search engine result page (SERP) provides the clearest accessible picture of a search algorithm's use of SEO strategies directed toward its activity.

- SERP reveals the the combined activity of a human search user's keyword search, a human designer's SEO strategies, and the search algorithm's ability to match the two.
  - Because search is the way information is found, **composing for search algorithms is as important as composing for humans** seeking the information.
  - Consider the [200+ signals](#) that Google's algorithm reportedly takes into account in displaying search results: those **signals represent the standards by which content should be created and designed** for algorithmic processes.
- Because everything about search is proprietary and secret, our only measure of the algorithmic UX is page placement on SERP. But it's an important consideration in design.

BLACK HAT

BLACK HAT STRATEGIES

- Duplicate content
- Invisible text and stuffed keywords
- Cloaking or re-directing the user to another site or page
- Links from sites with non-relevant content

WHITE HAT

WHITE HAT STRATEGIES

- Relevant content
- Well-labeled images
- Relevant links and references
- Complete sentences with good spelling and grammar
- Standards-compliant HTML
- Unique and relevant page titles

Black Hat vs White Hat SEO, InBound Marketing, Inc.

- SEO is not only about marketing: It's about being found at *all* on the web.
- SEO strategies may be nefarious and ethical, and any combination thereof.
- The role of TC in SEO is ethical instruction and practice.

Let's look! Google's Ranking Factors: The Complete List (2020)

BACKLINKO

42,584
shares
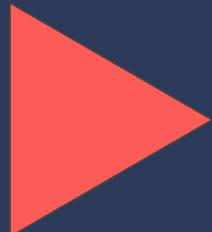
Google's 200 Ranking Factors: The Complete List (2020)

by Brian Dean · Updated Jan. 22, 2020

Study network activity to measure use of analytics tools embedded on pages

"Developers interact and influence processing through a rich user interface, client libraries, and APIs that are organized into four main components: collection, configuration, processing, and reporting.

- **Collection**
    - Collects user-interaction data.
- **Configuration**
    - Allows you to manage how the data is processed.
- **Processing**
    - Processes the user-interaction data with the configuration data.
- **Reporting**
    - Provides access to all the processed data."

Google Analytics Developers Guide, https://developers.google.com/analytics

Google Analytics Developers Guide, https://developers.google.com/analytics
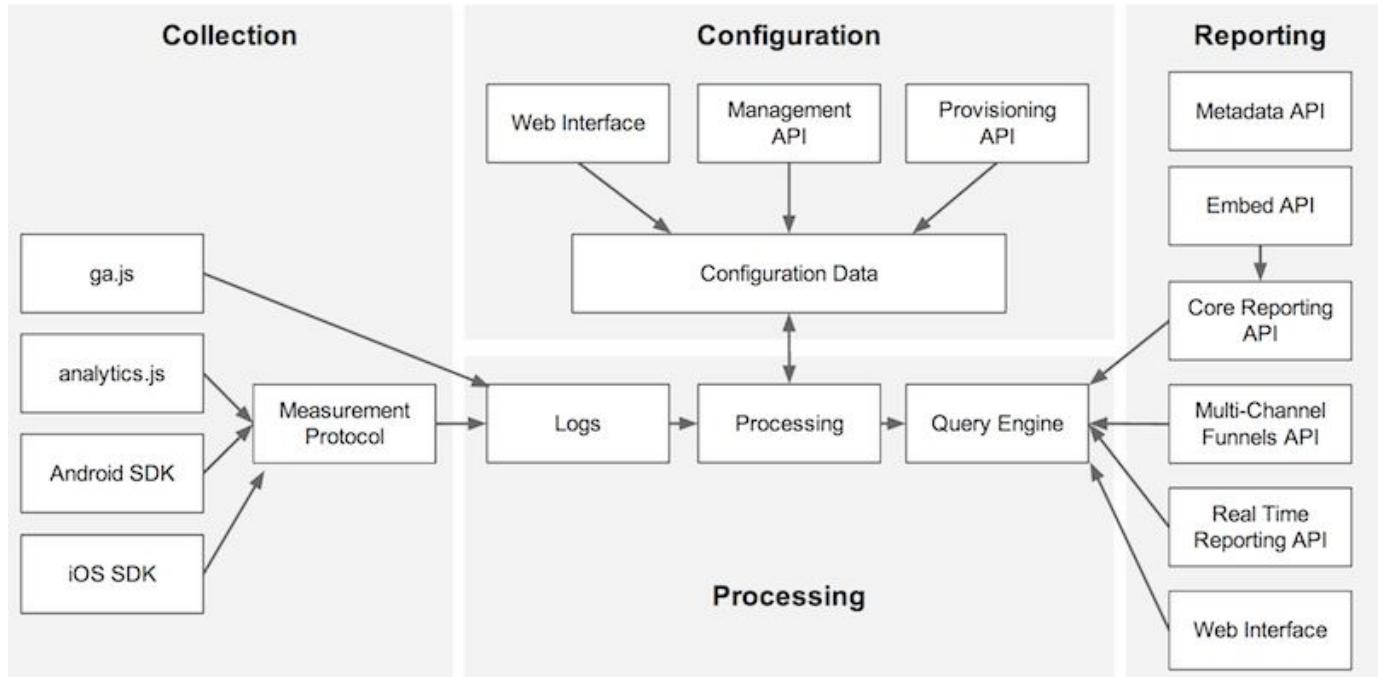
Web developers enable collection by installing the Google Analytics scripts on their sites and apps. Processing is opaque, visible only by reports on the processed data. The role of TC is to reveal network activity and algorithm-centered processes inherent when installing analytics platforms.

Let's look! WASP.Inspector plug-in in Chrome Developer Tools
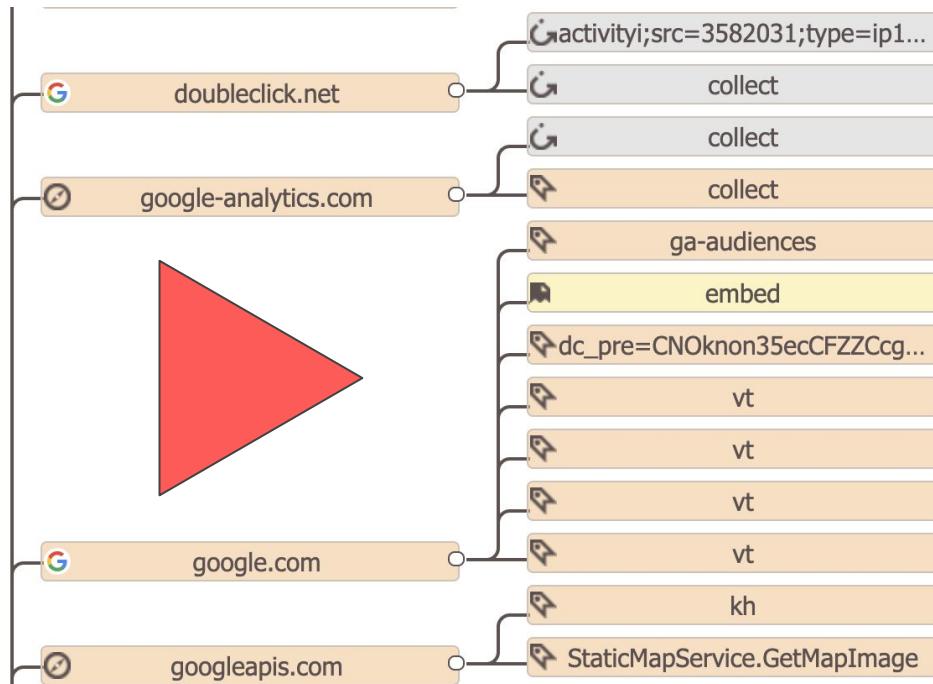
Study advertising platforms to measure use of embedded tracking pixels

Online advertising platform pixels track and trace human users, but they do so entirely through algorithms.

Human users are largely unaware of the scope of information that advertising pixels can and do capture and share. Developers and content managers may also be unaware.

Understanding ways that algorithmic processes can be defined to target audiences using demographic and psychographic data can provide composers important tools to help them draw ethical and accurate connections between keywords, targets, and content.

NoVA 21-60 All

Location: United States: Washington D. C. (+15 mi) Washington, District of Columbia; Culpeper (+20 mi), Fredericksburg (+15 mi), Herndon (+10 mi), Leesburg (+10 mi), Manassas (+15 mi), Warrenton (+10 mi) Virginia

Age: 21 - 60

People Who Match: Interests: Brewery, Apprenticeship, Brewing, Microbrewery or Craft Beer and Brewing, Education Level: High school grad or Some college

And Must Also Match: Interests: Career

Detailed Targeting Expansion: ⓘ On


ⓘ **Detailed Targeting Expansion Is On**

We recommend keeping expansion on since it provides more opportunities for improved performance. If you want to turn if off, you can duplicate your audience and deselect detailed targeting expansion.

Learn More

Duplicate Audience
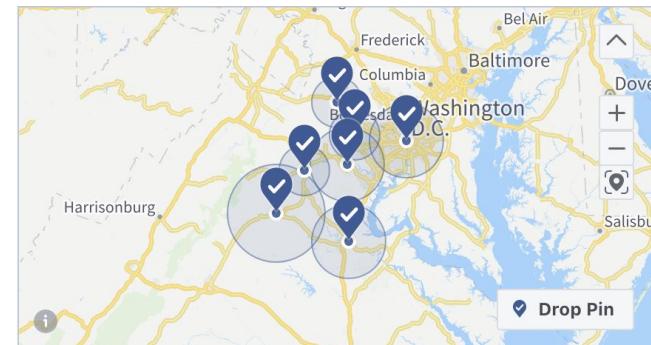
Microtargeting by city, county, zip code, and geolocation is available in all platforms (Facebook is shown). Users are tracked and comprehensive browsing activity captured up to 30 days from being served an ad. The role of TC is ethical practice and instruction in targeting methods.

Let's look! Facebook Ads platform for SPCS at UR
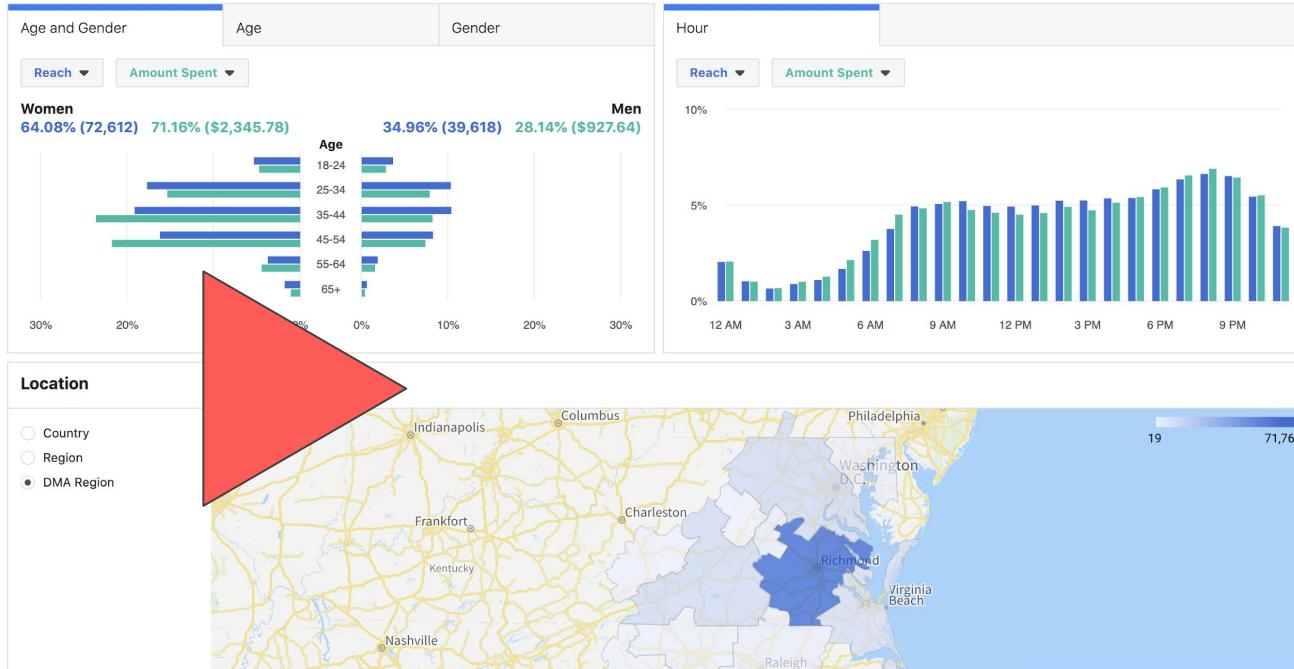
Toward a heuristic for studying & measuring posthuman UX

Area of Analysis	Guiding Questions	Related Methods
SEO	Have SEO principles been followed in structuring and composing content to enable clear matches between potential search terms and indexed content?	- Optimize design & content - Pay attention to ranking factors - Conduct searches on keyword - Correlate SERP to SEO
Analytics	Does the website include scripts designed to be read by analytics tools? - Written accurately? - Who receives results? - How is data interpreted? - Are audiences included?	- Set up & encode scripts - Study platform collection, configuring, processing & reporting functions - Review data reports - Interpret present & missing data
Advertising	Does the website include tracking pixels tied by scripts to advertising platforms? - Written & inserted accurately? - Collect only needed information? - Tag manager used effectively? - Privacy policy adequately cover pixel activity?	- Set up platforms accurately - Embed pixels & scripts precisely - Study keyword auction (search) and target audience (social) creation - Trace personal information collected by advertising processes

Are human users being treated ethically by nonhuman actors in the assemblage?
If so, how do you know? If not, what tools are available to rectify this situation?

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Thank You!
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