To whom do sites answer?

W3C Permissions Workshop
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Accountability

*n.* liability to be called on to render an account
Conditions for Accountability

1. Actions need to be reported
2. Misconduct requires punishment

“A is accountable to B when A is obliged to inform B about A's (past or future) actions and decisions, to justify them, and to suffer punishment in the case of eventual misconduct” -- Andreas Schedler, "Conceptualizing Accountability", 1999.
The Web, Pre-Javascript

Static pages

Pages could use network resources

Limited to displaying what fit in the window

(Caveat: <blink> and animated .gif)
Loading a site

Condition: visit site, click link

Accounting: loading spinner, status bar

Redress: stop button
Rendering a site

Condition: visit site

Accounting: site is visible

Redress: close the window
Javascript
Condition: visit site
Accounting: slow script dialog (?), OS (?)
Redress: close window
window.open
Condition: none --> engagement gesture
Accounting: a new window is visible
caveat: popunders
Redress: close the window
<input type=file>
Condition: selection of file to upload
Accounting: none
Redress: none
geolocation

First real attempt to gain permission for access to sensitive information

First API to use the doorhanger

Accountability: varies

Redress: none
getUserMedia
Condition: doorhanger
Accounting: on-screen indicators, camera light
Redress: varies
Notifications

Condition: doorhanger

Accounting: popup message

Redress: action menu on notification, or byzantine mess of hard-to-find, browser-specific menus
Push

Condition: (see Notifications)

Accounting: (mostly Notifications)

Redress: (see Notifications)
For Discussion

Browsers often infer permission

Design language and expectations both evolve

Calling sites to account requires more than passing the problem on to users