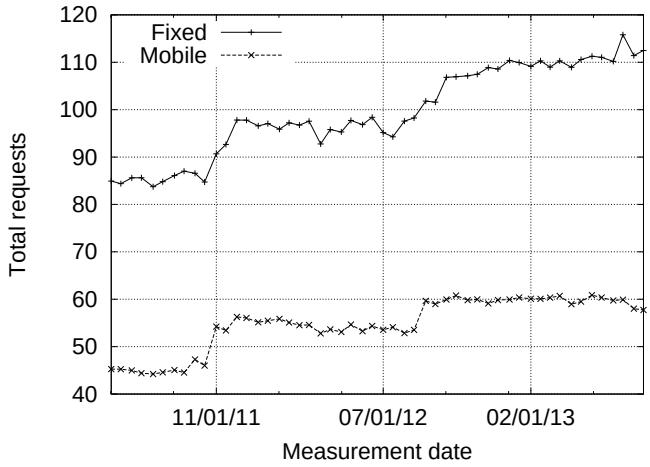
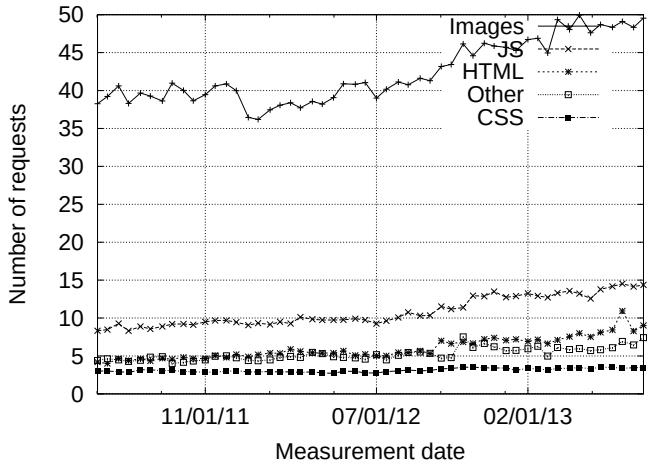
I. Comparison of Desktop and Mobile Web Page Characteristics

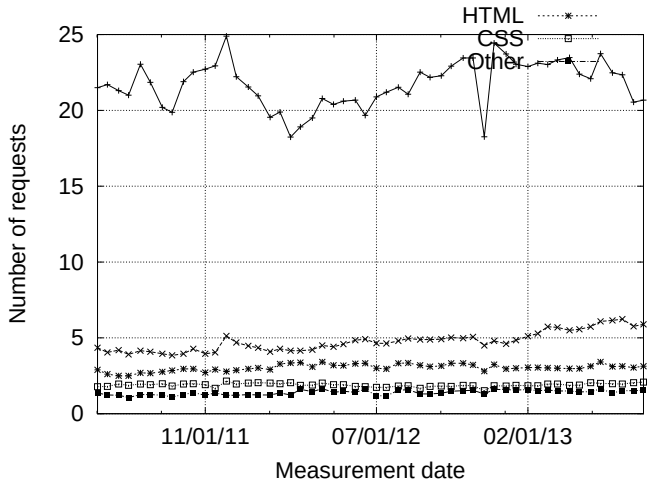
A. Average Number of Web Site Objects



(a) Average total number for desktop and mobile client versions.



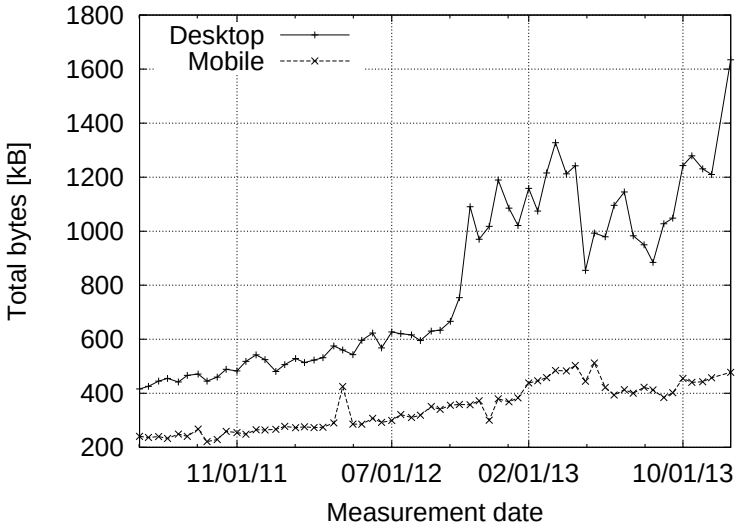
(b) Average number by category for desktop client versions.



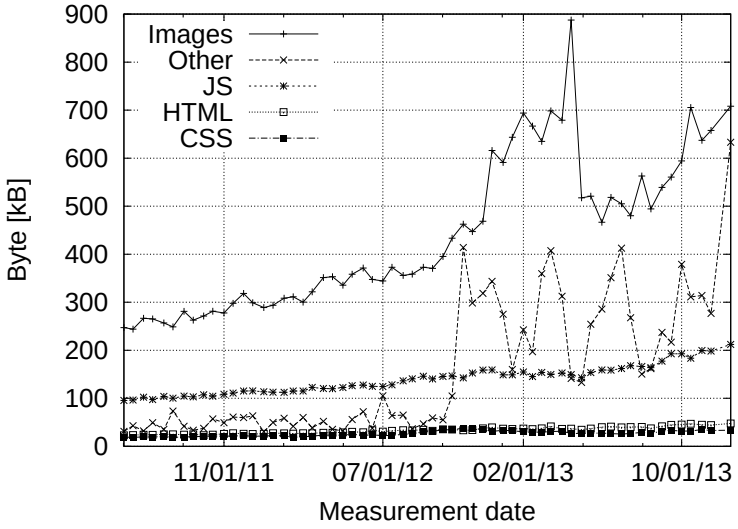
(c) Average number by category for mobile client versions.

Fig. 1. Average total number of requests for objects constituting a web page in desktop and mobile versions and decomposition into HTML, CSS, Java Script, Images, and Other object categories.

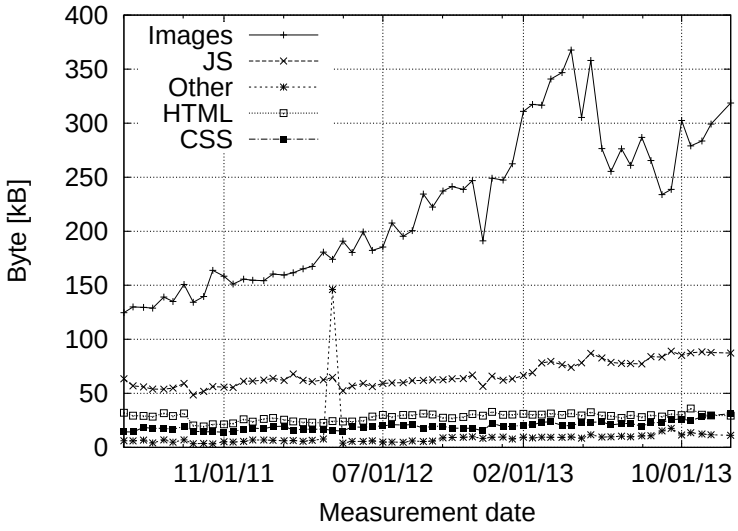
B. Average Web Page Sizes



(a) Average total amount for desktop and mobile client versions.



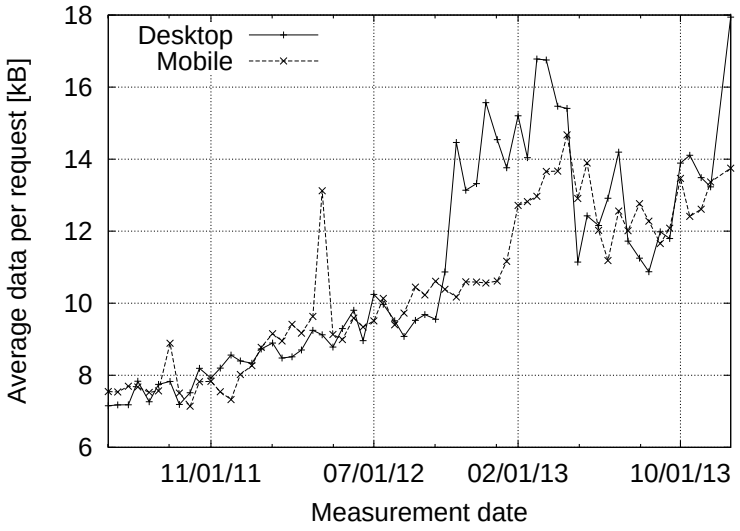
(b) Average amount by category for desktop client versions.



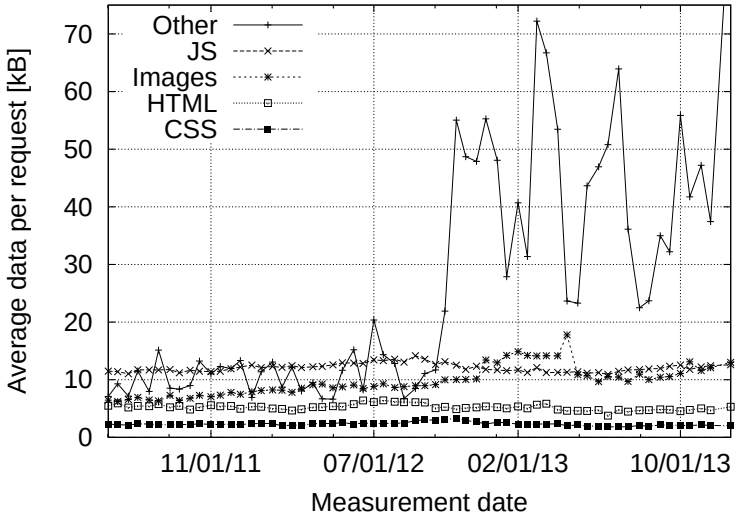
(c) Average amount by category for mobile client versions.

Fig. 2. Average total number of bytes constituting a web page in desktop and mobile versions and decomposition into HTML, CSS, Java Script, Images, and Other object categories.

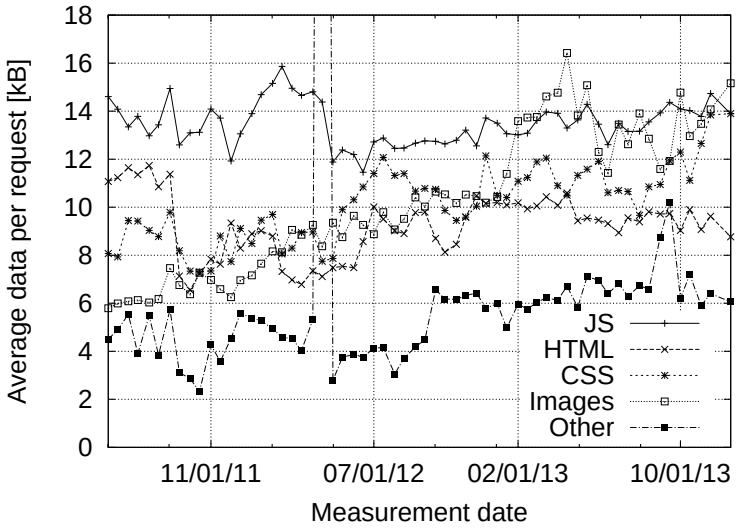
C. Data per Web Page Object



(a) Average total amount for desktop and mobile client versions.



(b) Average amount by category for desktop client versions.



(c) Average amount by category for mobile client versions.

Fig. 3. Average number of bytes per web page object request for desktop and mobile versions and decomposition into HTML, CSS, Java Script, Images, and Other object categories.

Fig. 4. Maximum age of web page objects for desktop and mobile web clients.

D. Caching of Web Page Objects

One of the main assumptions for the prior evaluation was that the data represents "first views," i.e., the dataset's underlying measurements do not consider the caching of web pages after initial visits. The individual entries in the datasets obtained from httparchive.org, however, additionally contain the max-age header (amongst other, such as expiration) directives for evaluation of the maximum lifetime of objects on the requesting device. The locally cached data can have a positive impact on the required network access, especially for mobile devices.

We illustrate the different max-age values obtained from the data in Figure 4 (a) for desktop client requests.