



Figures and figure supplements

Little evidence that Eurasian jays protect their caches by responding to cues about a conspecific's desire and visual perspective

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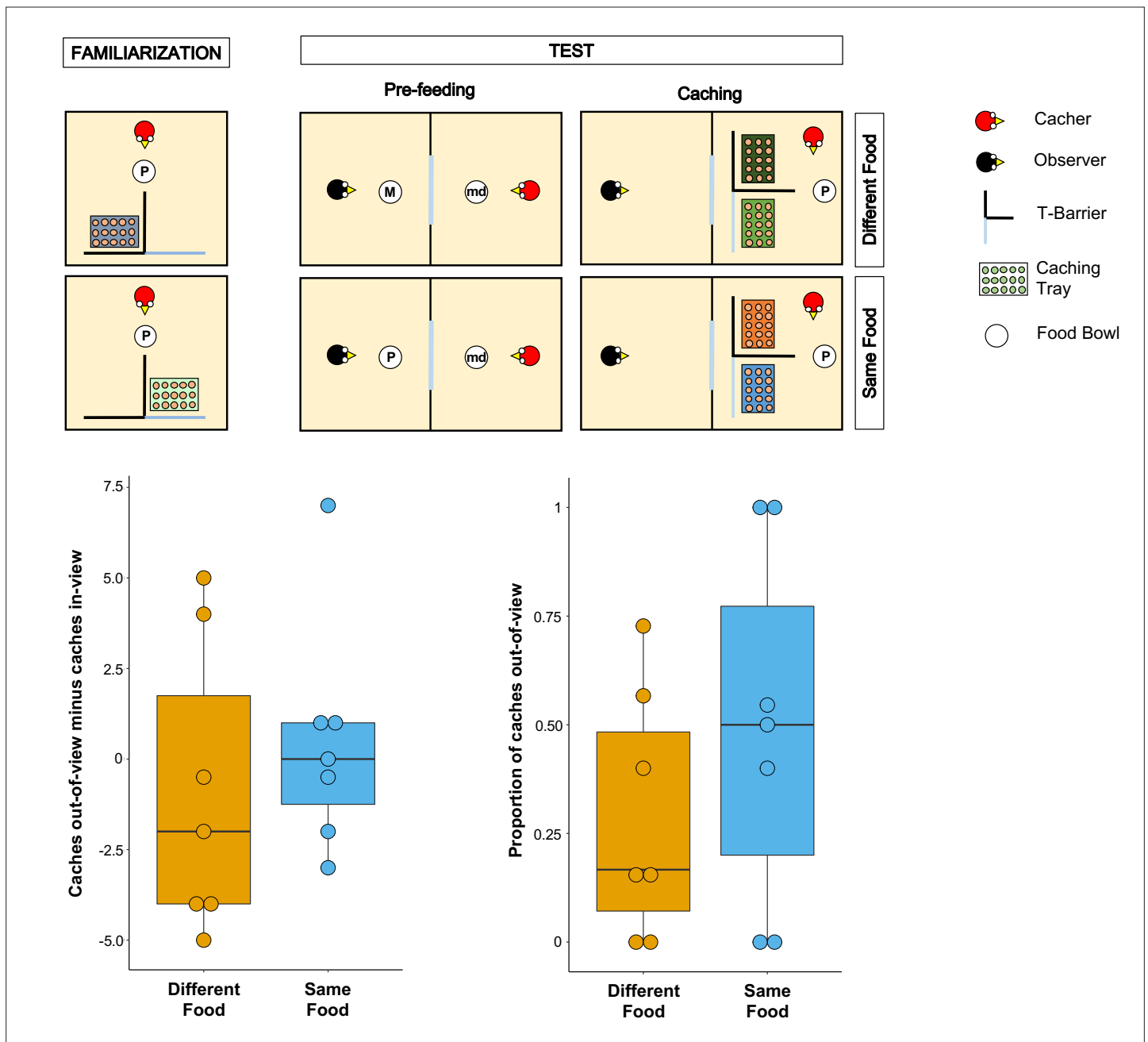


Figure 1. Methods and results of Experiment 1. Top panel: Top-view schematic representation of the set-up and procedure used in Experiment 1. In the familiarisation (left), the cacher bird received two trials, one in which the caching tray was placed near the opaque arm of the barrier, and one in which the tray was placed near the clear arm of the barrier. In the test, trials were composed by a pre-feeding phase (middle) and a caching phase (right). The cacher bird received two trials that differed in the type of food that was provided to the observer bird in the pre-feeding phase. In one trial (*Different Food* condition), the food provided to the observer in the pre-feeding phase differed from the food the cacher bird could subsequently cache. In the other trial (*Same Food* condition), the food provided to the observer in the pre-feeding phase was the same as the food the cacher bird could subsequently cache. In the pre-feeding phase of both trials, the cacher bird was provided with a handful of maintenance diet (md). Note that, for explanatory purposes, the scheme shows the cacher as being provided with peanuts (P) in the familiarisation and in the caching phase of the two test trials. However, in the experiment, cacher birds were randomly assigned to one type of food (either peanuts or macadamia nuts), which was used consistently in the familiarisation and in the caching phase of all trials. Bottom Panel: Box and whisker plots of data in Experiment 1. The plot on the left shows the difference in the number of items cached in the *out-of-view* tray minus the number of items cached in the *in-view* tray in the two experimental conditions. The plot on the right shows the proportion of items cached in the *out-of-view* tray (out of total caches) in the two experimental conditions.

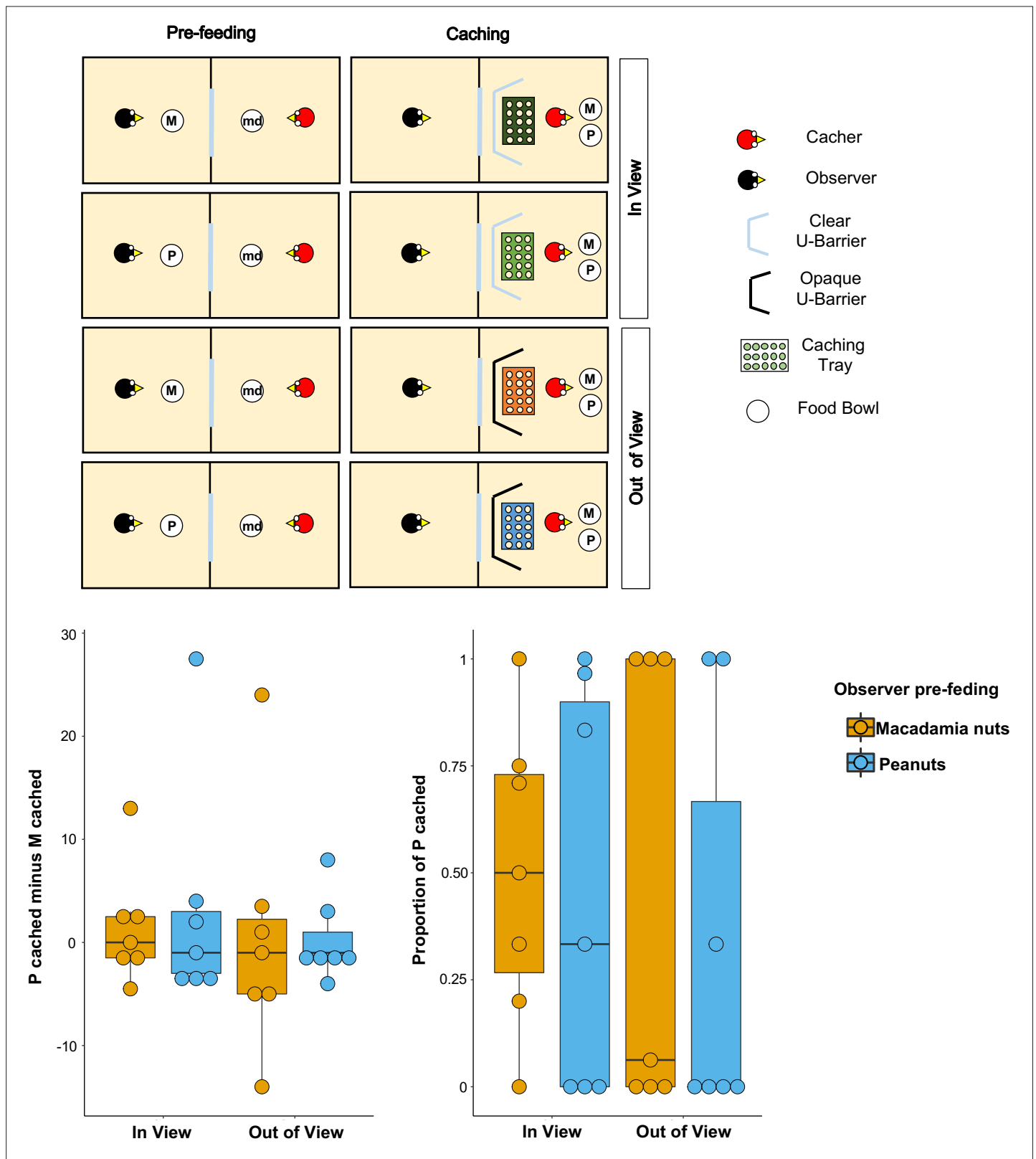


Figure 2. Methods and results of Experiment 2. Top panel: Top-view schematic representation of the set-up and procedure used in the test of Experiment 2. Trials were composed by a pre-feeding phase (left panels) and a caching phase (right panels). The cacher bird received two trials with the transparent U-barrier (*In-view* condition, top panels), and two trials with the opaque U-barrier (*Out-of-view* condition, bottom panels). Within each condition, trials differed in the type of food (either peanuts, P, or macadamia nuts, M) that was provided to the observer in the pre-feeding phase. The *Figure 2 continued on next page*

Figure 2 continued

cacher bird was always presented with a handful of maintenance diet (md) in the pre-feeding phase of all trials. Bottom panel: Box and whisker plots of data in Experiment 2. The plot on the left shows the difference in the number of peanuts cached minus the number of macadamia nuts cached for each condition, whereas the plot on the right shows the proportion of P cached (out of total items cached) in each condition. In the *In-view* condition, the observer had visual access to the caching tray, whereas in the *Out-of-view* condition, the observer did not have visual access to the caching tray. The colour of the boxes in the plot differs on the basis of the type of food that was provided to the observer in the pre-feeding phase: blue denotes that the observer had been pre-fed P and orange denotes that the observer had been pre-fed M.

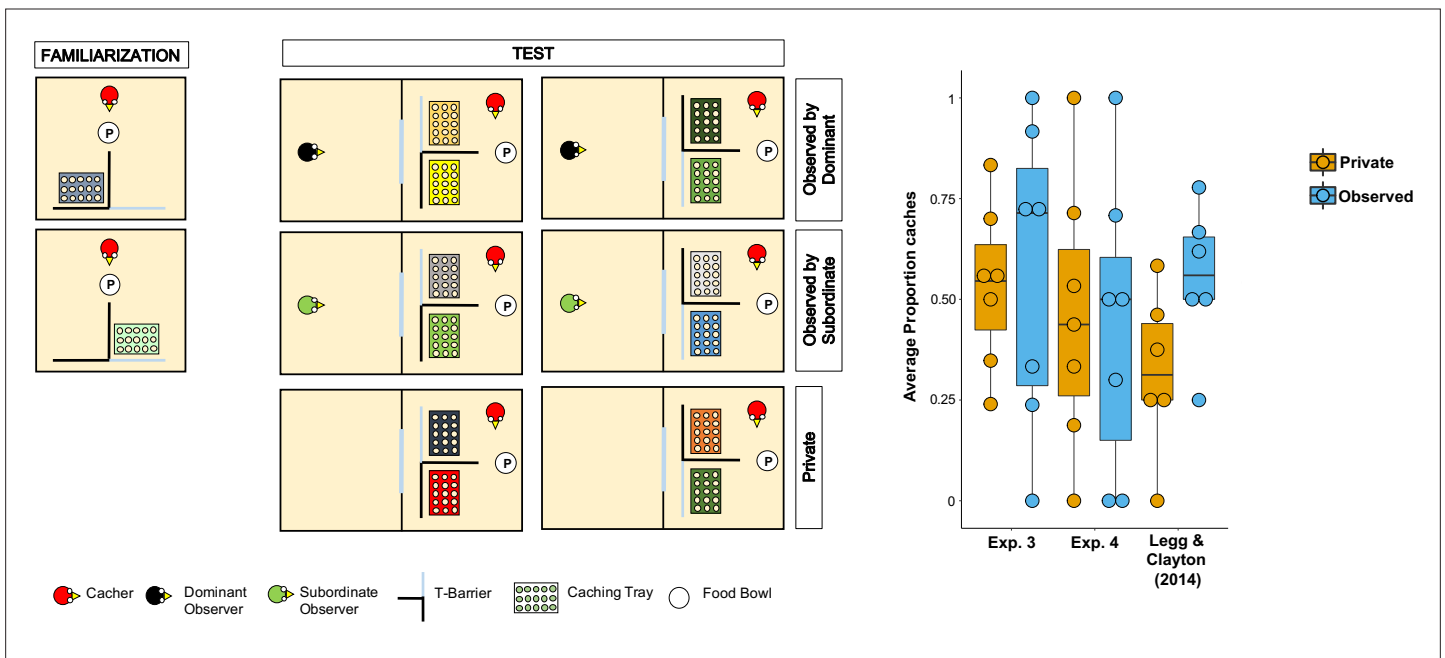


Figure 3. Methods and results of Experiment 4. Left: Top-view schematic representation of the set-up and procedure used in Experiment 4. In the familiarisation (left panels), the cachet bird received two trials, one in which the caching tray was placed near the opaque arm of the barrier (top panel), and one in which the tray was placed near the clear arm of the barrier (bottom panel). In the test (central and right panel), birds were tested in three conditions: *Observed by dominant*, *Observed by subordinate*, *Private*. In each condition, the cachet received two trials that differed in the orientation of the T-barrier. Right: Box and whisker plot of data in Experiments 3, 4, and in **Legg and Clayton, 2014**. The plot shows the average proportion of items cached in the *out-of-view* tray out of the total number of items cached, in the *Private* and *Observed* conditions. Note that data in the *Observed by dominant* and *Observed by subordinate* conditions were averaged for Experiment 4 and for **Legg and Clayton, 2014**'s study.

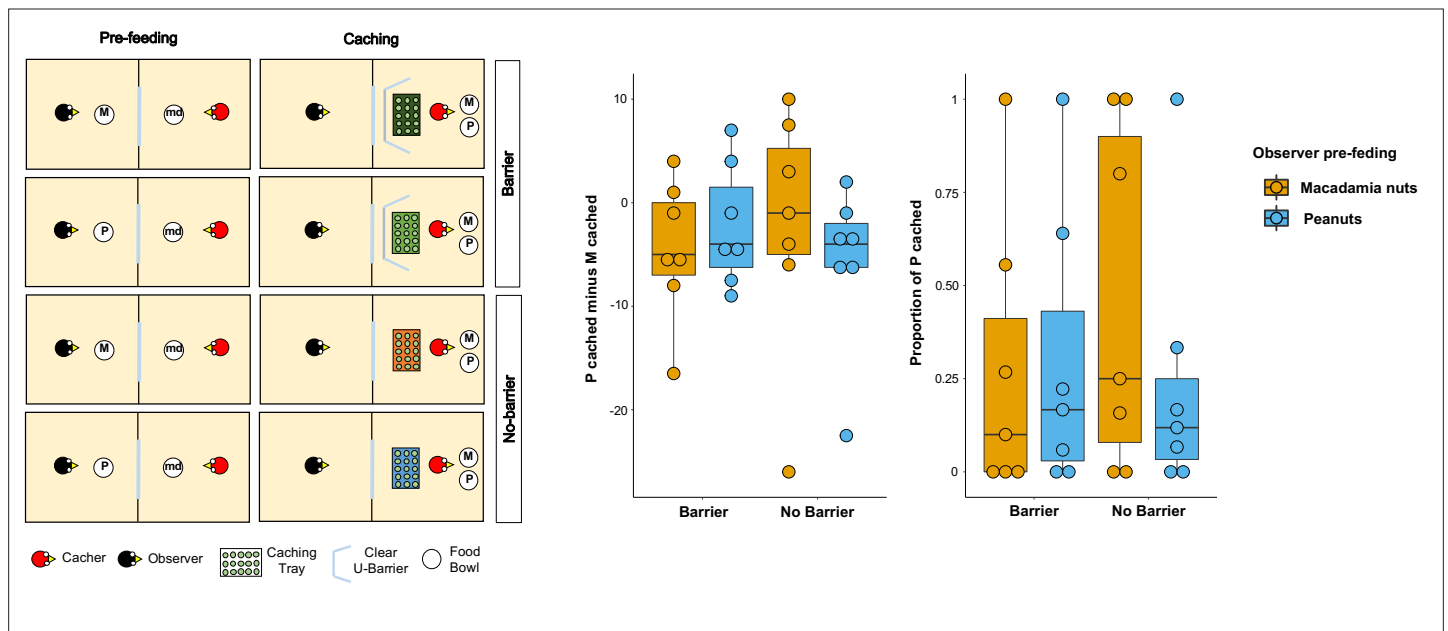


Figure 4. Methods and results of Experiments 5. Left: Top-view schematic representation of the set-up and procedure used in the test of Experiment 5. Trials were composed by a pre-feeding phase (left panels) and a caching phase (right panels). The cacher bird received two trials with the transparent U-barrier (*Barrier* condition, top panels), and two trials with no barrier (*No-barrier* condition, bottom panels). Within each condition, trials differed in the type of food (either peanuts, P, or macadamia nuts, M) that was provided to the observer in the pre-feeding phase. The cacher bird was always presented with a handful of maintenance diet (md) in the pre-feeding phase of all trials. Right: Box and whisker plots of data in Experiment 5. The central plot shows the difference in the number of peanuts cached minus the number of macadamia nuts cached in the *Barrier* condition (left) and *No-barrier* condition (right). The plot on the right shows the proportion of P cached (over the total number of items cached) in the two conditions. The colour of the boxes in the plot differs on the basis of the type of food that was provided to the observer in the pre-feeding phase: blue denotes that the observer had been pre-fed P and orange denotes that the observer had been pre-fed M.

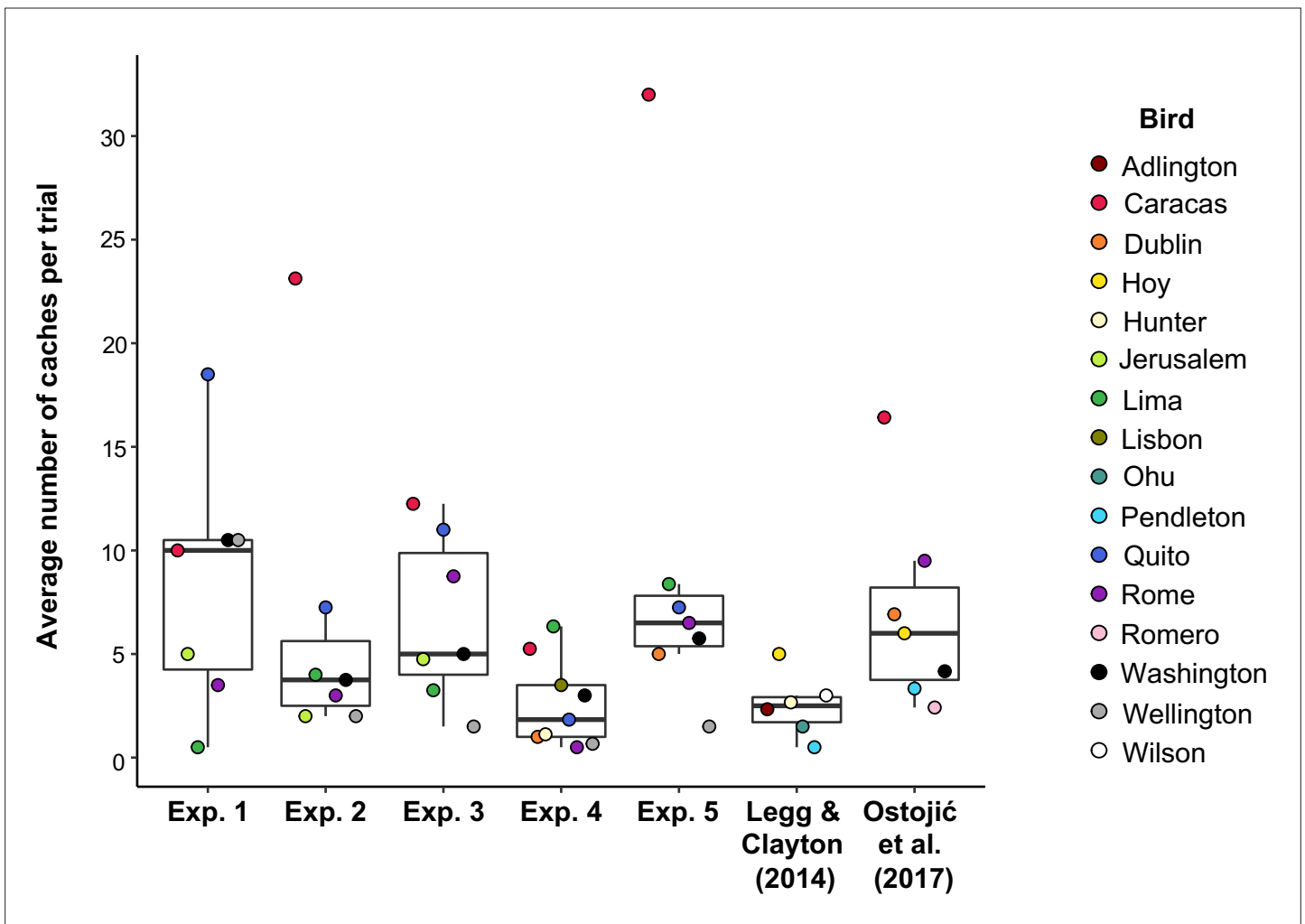


Figure 5. Box and whisker plot showing the mean number of items cached per trial in Experiments 1–5, *Legg and Clayton, 2014* and *Ostojic et al., 2017*. Note that *Ostojic et al., 2017* tested California scrub-jays and Eurasian jays but only Eurasian jays were relevant to the analysis, and therefore included in the plot. Median_{Experiment 1} = 10; Median_{Experiment 2} = 3.75; Median_{Experiment 3} = 5; Median_{Experiment 4} = 1.83; Median_{Experiment 5} = 6.5; Median_{Legg & Clayton (2014)} = 2.5; Median *Ostojic et al., 2017* = 6.