Supplementary Materials

Categorisation of overall prototype

In a separate study to that reported here we measured the affective content of the face used as the overall prototype in the current study, which was produced by averaging across 50 exemplars of each of the six basic expressions (happy, sad, fear, anger, surprise and disgust) plus neutral. Participants (n = 48) categorised the affective content of seven individual expression stimuli, which included the average of all expressions used as the overall prototype here. Each expression was presented for 500ms and participants used a hand-held keypad to select the emotion that best described the affective content of that expression from a choice of the six basic emotions. Each participant saw each expression ten times.

For each participant, and each expression, the percentage of responses for each of the six basic emotions was calculated. These were then averaged over all participants to give overall mean responses. The overall mean responses for the average of all expressions, used as the overall prototype in the current study, are shown in Figure S1.
Figure S1. Categorisation of affective content of average of all expressions (used as overall prototype in current study). Dotted line indicates level of chance performance. Error bars show 95% confidence limits.

Categorisation of prototypical expressions and anti-expressions

In the same study described in the previous section, participants also categorized the affective content of the prototypical expressions and anti-expressions used in the main study, and shown in Figure 4 of the article. The results of these are shown in Figure S2.
Figure S2. Categorisation of affective content of prototypical expressions (left column) and anti-expressions (right column) for identities, from top M1, M2 F1 and F2.

Distributions of aftereffects for individual anti-expression adapters

The figures below show the distribution of responses when categorising expression aftereffects following adaptation to individual anti-expressions. These are shown for the three strengths used in the current study. Figure S3 shows responses with adapters at 100% strength, Figure S4 shows responses at 50% strength and Figure S5 at 25% strength.
Figure S3. Perception of anti-expression aftereffect in prototype probe of the same identity as the adapter (top) and different identity to adapter (bottom). Adapter strength 100%. 

Figure S4. Perception of anti-expression aftereffect in prototype probe of the same identity as
the adapter (top) and different identity to adapter (bottom). Adapter strength 50%.
Figure S5. Perception of anti-expression aftereffect in prototype probe of the same identity as the adapter (top) and different identity to adapter (bottom). Adapter strength 25%.