**What Is a Falsified Image?**

We have noticed a few author’s responses to retractions of papers in which data-images have been categorized as falsified,  as assertions that they have done nothing wrong   This table presents a schema for understanding the different forms of data-image falsification.  The basic distinctions in the schema have to do with whose dataset is being used, whether the dataset is the subject of the present report, and whether the image has been manipulated inappropriately.

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| **Falsification** | **Falsification and Plagiarism** |
| **Images from dataset being reported** | **Images from other datasets** |
| **A**   * Image from researcher’s own dataset * Deliberately mislabeled * No inappropriate manipulation of image     *Falsification =*mislabeling | **C**   * Image from another researcher’s dataset (published or unpublished) * Manipulation of image:  none or inappropriate     *Falsification through plagiarism =*claiming another’s work as one’s own  *Falsification through manipulation:*only if image was also inappropriately manipulated |
| **B**   * Image from researcher’s own dataset * Accurately labeled * Inappropriate manipulation of image     *Falsification =* inappropriate manipulation | **D**   * Image from own dataset previously published * Deliberately mislabeled * Manipulation of image:  none or inappropriate     *Falsification through self-plagiarism:*claiming that the image represents the dataset being reported  *Falsification through manipulation:  only if image was also inappropriately manipulated* |

* In A, the researcher uses an image from the dataset being reported, makes no inappropriate manipulations, but deliberately mislabels it.  The falsification here is the mislabeling.
* In B, the researcher again uses his own image from the dataset being reported in the paper but manipulates it inappropriately.  The falsification is the inappropriate manipulation.

By contrast, situations C and D involved both falsification and plagiarism.

* In C, the researcher uses another researcher’s dataset (whether it has been published or not), mislabels it as her own, and may or may not have manipulated the image inappropriately.  The falsification is claiming the image as her own; she may also have falsified the image itself.
* In D, the researcher uses an image from his own previous research that has been published and deliberately mislabels it as belonging to the new research.  The falsification is claiming that the image is from the current research.  (This is sometimes called “self plagiarism.”)

A better grasp of data-image handling involves knowing what is acceptable, and what is not acceptable.  We hope this table can provide some clarification in the conversation on data-image integrity in the sciences.