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# Parse a string argument for which pairing scheme to utilize
.parsePairs <- function(pairs, array, array_class){
  # Valid schemes for printing if user is unaware of options
  valid_schemes <- c("largest", "lower", "upper", "consecutive", "all")
  # Set default to be the consecutive pair scheme
  if(class(pairs) == "logical"){pairs <- "consecutive"}
  # Stop function call if the argument is invalid
  if(!(pairs %in% valid_schemes)){
    scheme_list <- paste(valid_schemes, collapse = ", ")
    stop(paste("Invalid pair scheme. Try one of the following: ", scheme_list, ".", ""))
  }
  # // Once we verify that we have a valid pair scheme string, try to parse it.
  # First, obtain a matrix by inferring array type; if ensemble take first matrix
  if(array_class == "ensemble") { P <- array[[1]] }
  else if(array_class == "matrix") { P <- array }
  # Obtain the dimension of the matrix
  N <- nrow(P)
  # Parse the pair string and evaluate the pair scheme
  if(pairs == "largest"){pair_scheme <- data.frame(i = 2, j = 1)}
  else if(pairs == "consecutive"){pair_scheme <- .consecutive_pairs(N)}
  else if(pairs == "lower"){pair_scheme <- .unique_pairs_lower(N)}
  else if(pairs == "upper"){pair_scheme <- .unique_pairs_upper(N)}
  else if(pairs == "all"){pair_scheme <- .all_pairs(N)}
  # Return pair scheme
  return(pair_scheme)
}

```