\* Since the column \*\*Remarks\*\* contains information that could be distributed in other columns, corrections or additional information, I will explore and clean this variable now.

\* After the replacement of the NA's in Remarks with \*\*No Remarks\*\*, I found out that we have \*\*614 Remarks\*\* that I need to treat

\* In order to ease the identification of key words in the remarks, I used an AI to analyze the \*\*614 unique outputs of Remarks\*\* to find some of the main keywords:"open", "work", "trial", "approach", "scare", "intrude", "stole", "steal", "corn", "ate", "audience", "sec", "before", "after", "left", "na", "foraging", "alarm"

\* From this output I decided to explore the \*\*614\*\* unique outputs of Remarks by identifying the \*\*amount of lines and the rows where there are the following key words\*\*:

1. "open", "work", "trial"

2."approach", "scare", "intrude", "stole", "steal", "corn", "ate"

3. "numerical value", "m", "distance"

4. "3 code letter", "four code letter"

5. "audience",

6. "sec", "before", "after", "left",

7. "na",

8. "foraging"

9. "alarm"

\* We have;

1. Equipment and Procedure Related words

- Keywords: "did not open", "opened early", "did not work", "first trial"

- Examples: "Nge box did not open because of the battery", "opened seychelles box early by accident"

2. Animal Behavior Observations

- Keywords: "approached", "did not approach", "scared", "intruded", "stole", "aggression", "tolerance"

- Examples: "Sey came to the boxes once they were open", "Sirk was scared by Oerw", "oerw intruded"

3. Spatial Measurements and Corrections

- Keywords: Measurements (e.g., "6m", "7m"), "distance"

- Examples: "6m", "should have been 1m"

4. Specific Individual Actions or Reactions

- Keywords: Names of individuals (e.g., "Sey", "Nge"), specific actions (e.g., "ate", "moved", "looked at")

- Examples: "Nge and Oerw vo to MA", "Xia looked at piep"

5. Audience or Other Individual Involvement

- Keywords: "audience", names of other individuals not part of the primary observation, "present"

- Examples: "unknown audience", "Buk stole corn from Ndaw", "Juvenile also present"

6. Timing and Sequence of Events

- Keywords: "before", "after", "when", "then"

- Examples: "before aggression", "after 30 sec", "when he left she came"

7. Specific Observational Details or Corrections

- Keywords: Specific observations (e.g., "ate all the corn"), corrections or clarifications

- Examples: "Piep not approaching", "Piep box didn't open so they shared the corn in Xia box"

8. Miscellaneous or Unclear Remarks

- Keywords: Ambiguous terms, unclear references

- Examples: "na", "unknown audience", "contact calling in the background"

- Action: These may require further clarification from the research team or might be categorized as 'miscellaneous' if they do not fit into other themes.

9. Technical or Environmental Notes

- Keywords: "alarm", "left boxes on the ground", "foraging"

- Examples: "There was an alarm and we left the boxes on the ground"

- Action: Log these as environmental or technical notes that may have influenced the experiment.

##### Vizualization of the Remarks Keywords

Before making any changes I will make a barplot of the main keywords in the column remarks to see what they are and in which proportion they are found. It has to be noted that some of the words are used in different contexts and have different meaning. This is why I will not create any rule from it

```{r Remarks Exploration, echo=FALSE}

unique\_remarks <- unique(Bex$Remarks)

head(unique\_remarks)

library(dplyr)

library(ggplot2)

# Define the keywords list properly before the loop

keywords <- c("open", "work", "trial", "approach", "scare", "intrude", "stole", "steal", "corn", "ate", "audience", "sec", "before", "after", "left", "na", "foraging", "alarm")

# Reinitialize to store updated counts

keyword\_counts <- data.frame(Keyword = character(), Counts = integer(), stringsAsFactors = FALSE)

# Recalculate counts

for (kw in keywords) {

count <- sum(str\_detect(tolower(Bex$Remarks), kw))

keyword\_counts <- rbind(keyword\_counts, data.frame(Keyword = kw, Counts = count))

}

# Plot with counts on bars

ggplot(keyword\_counts, aes(x = reorder(Keyword, -Counts), y = Counts)) +

geom\_bar(stat = "identity", fill = "steelblue") +

geom\_text(aes(label = Counts), hjust = -0.1, size = 3) +

coord\_flip() +

labs(title = "Frequency of Main Keywords in Remarks", x = "Keyword", y = "Frequency") +theme\_minimal()

```

```{r Checking for keywords in Remarks, include=FALSE}

# Checking for keywords in Remarks

# Ensure 'Remarks' is treated as a character column

Bex$Remarks <- as.character(Bex$Remarks)

# Define individual keywords as separate categories

keywords <- list(

open = "open",

work = "work",

trial = "trial",

approach = "approach",

scare = "scare",

intrude = "intrude",

stole = "stole",

steal = "steal",

corn = "corn",

ate = "ate",

numerical\_value\_m = "\\b\\d+m\\b", # Regex pattern for numerical value followed by 'm' (e.g., "6m")

audience = "audience",

sec = "sec",

before = "before",

after = "after",

left = "left",

na = "na",

foraging = "foraging",

alarm = "alarm"

)

# Modified function to find rows with keywords and print details

find\_keyword\_rows <- function(df, keyword) {

rows <- which(str\_detect(tolower(df$Remarks), keyword))

if (length(rows) > 0) {

for (row in rows) {

print(paste("Keyword:", keyword, "- Row", row, ":", df$Remarks[row]))

}

}

return(rows)

}

# Applying the modified function to each category

results <- lapply(keywords, function(kw) {

rows <- find\_keyword\_rows(Bex, kw)

return(unique(sort(rows)))

})

# Counting the number of lines for each category

line\_counts <- sapply(results, length)

```

```{r Display amount key words, echo=FALSE}

# Ensure the knitr package is loaded for kable

library(knitr)

# Sort line\_counts in descending order

sorted\_line\_counts <- sort(line\_counts, decreasing = TRUE)

# Display the ordered results using kable

kable(sorted\_line\_counts, caption = "Counts of Keywords in Remarks (Ordered by Count)")

```

###### 2.3.1.2 Detailed cleaning of Remarks

\* Before cleaning the column remarks I am going to make a backup of ma data

```{r Backup before cleaning remarks, include=FALSE}

# Save the current Bex dataframe to a file

saveRDS(Bex, file = "Bex\_backup\_before\_changes\_in\_remarks.rds")

```

\* For easier manipulation and less coding I will transform my data into a data.table to make batch processing when redistributing the information found in the column remarks. once I am finished cleaning the remarks (or the dataset depending of the use) I will transform again the data table into a data table

```{r Change dataframe in datatable, echo=FALSE}

# Convert Bex to data.table if it's not already

library(data.table)

if (!is.data.table(Bex)) {

setDT(Bex)

}

```

\* \*\*Remarks - alarm (x1)\*\*

Row: \*\*1816\*\*

-Here is the content of the column Remarks for row 1816: There was an alarm and we left the boxes on the ground. Kom came to the box and then left. Oort came and Kom came back immediately. No camera footage.

1. I want to create a column \*\*Context\*\* where every cell will be filled with "No Context"; this column will be used to insert any \*\*information related to context as BGE, Aggression, Affiliative interaction and so on\*\* when the context could be relevant

1.1. I want the line 1816 of "Context" to display "Alarm Event"

2. I want to create a column "Special behaviour" where every cell says "No" per default; this column will be used to insert any particular behaviour noted during the experiment as \*\*Coming back to the box, getting robbed\*\* and so on in order to keep track of these occurences

2.1. In the case of the row with the keyword "alarm", I want the line 1816 of "Special behaviour" to display "Back to box; Kom"

3.Once this is done, I want to replace the line 1816 of "Remarks" with "Treated"

```{r Remarks - alarm, echo=FALSE}

# Add 'Context' column if it does not exist

if (!("Context" %in% names(Bex))) {

set(Bex, j = "Context", value = "No Context") # Set default for all rows

}

# Add 'SpecialBehaviour' column if it does not exist

if (!("SpecialBehaviour" %in% names(Bex))) {

set(Bex, j = "SpecialBehaviour", value = "No") # Set default for all rows

}

#Display the row before changes

print(Bex[1816, .(Remarks, Context, SpecialBehaviour)])

# Apply changes for the "Alarm" event if it hasn't been treated yet

Bex[1816, `:=` (Context = "Alarm Event", SpecialBehaviour = "Back to box; Kom", Remarks = "Treated")]

# Display the row after changes to verify

print(Bex[1816, .(Remarks, Context, SpecialBehaviour)])

print(Bex)

```

\* \*\*Remarks - foraging (1x)\*\*

Row: \*\*1892\*\*

-Here is the content of the column Remarks for row 1892:Monkeys are all actively foraging

1. I want to put "Foraging" in the line 1892 of the column "Context"

2. I want to put "Treated" in the column "Remarks" in line 1892

3. I want to be sure the code is safe for multiple run

```{r Remarks - foraging,echo=FALSE}

# Display the row before changes

print(Bex[1892, .(Remarks, Context)])

# Update safely for the "Foraging" event if it hasn't been treated yet

if (Bex$Remarks[1892] != "Treated") {

Bex[1892, `:=` (Context = "Foraging", Remarks = "Treated")]

}

# Display the row after changes to verify

print(Bex[1892, .(Remarks, Context)])

```

\* \*\*Remarks - scare (2x)\*\*

Row:\*\*52 2249\*\*

-Here is the content of the column Remarks for row 52 and 2249: Sirk was scared by Oerw & oerw was scared to take the corn and nge ate her corn

1. I want to put "Scared;Sirk by Oerw" in the line 52 of the column "SpecialBehaviour" and "Scared;Oerw by Nge" in the line 2249 of the same column

2. I want to put "Intrusion" in the line 52 of the column "Context"

3. I want to create a column called \*\*"Got Corn"\*\* that will display "Yes" in every row and replace the row 2249 by "No;Oerw"

4. I want to put "Treated" in the column "Remarks" in line 52 and 2249 once the changes have been done

5. I want to be sure the code is safe for multiple run even when using the row number

```{r Remarks - scare, echo=FALSE}

## Initialize 'Got Corn' if not present

if (!"Got Corn" %in% names(Bex)) {

Bex[, `Got Corn` := "Yes"]

}

# Display the rows before changes

print(Bex[c(52, 2249), .(Remarks, Context, SpecialBehaviour, `Got Corn`)])

# Batch update for "Scare" event safely

key\_rows <- c(52, 2249)

if (!all(Bex$Remarks[key\_rows] == "Treated")) {

Bex[key\_rows, `:=` (

SpecialBehaviour = fifelse(.I == 52, "Scared; Sirky by Oerw", "Scared; Oerw by Nge"),

Context = fifelse(.I == 52, "Intrusion", Context),

`Got Corn` = fifelse(.I == 2249, "No; Oerw", `Got Corn`),

Remarks = "Treated"

)]

}

# Display the rows after changes to verify

print(Bex[c(52, 2249), .(Remarks, Context, SpecialBehaviour, `Got Corn`)])

```

\* \*\*Remarks - work (2x)\*\*

Rows: \*\*95 2105\*\*

-Content of the column Remarks for rows concerned (2x): The box did not work

1. I want to remove the rows 95 and 2105 of Bex and make the code safe for multiple run

```{r Remarks - work, echo=FALSE}

# Define the keyword for removal

keyword\_to\_remove <- "work"

# Display rows containing 'work' before changes

print(Bex[str\_detect(tolower(Bex$Remarks), keyword\_to\_remove), .(Remarks)])

# Find and mark rows for removal based on the keyword

rows\_to\_remove <- which(str\_detect(tolower(Bex$Remarks), keyword\_to\_remove))

if (!all(is.na(Bex$Remarks[rows\_to\_remove]))) {

Bex$Remarks[rows\_to\_remove] <- NA # NA used to 'remove' the remark

cat("Number of rows modified:", length(rows\_to\_remove), "\n")

} else {

cat("No rows need modification.\n")

}

# Display rows after changes to verify

print(Bex[str\_detect(tolower(Bex$Remarks), keyword\_to\_remove), .(Remarks)])

```

\* \*\*Remarks - not open (9x)\*\*

-Content of the column Remarks for rows concerned (9x): The box did not open

Rows: 320, 377, 632, 780, 899, 1360, 1445, 1652, 2209

1.(Audience)The remarks of the Row 321 indicated that some audience arrived:I want to replace the values in the column \*\*Audience\*\* of the row \*\*320\*\* and \*\*321\*\* with \*\*Sey;Piep;Sirk;Oup;Ome\*\*

2.(Got Corn) We will update the row called \*\*Got corn\*\* with new values:

- Row \*\*320\*\*: put \*\*No;Unk\*\* in "Got Corn"

- Row \*\*377\*\*: put \*\*No;Kom\*\* in "Got Corn"

- Row \*\*632\*\*: put \*\*No;Nge\*\* in "Got Corn"

- Row \*\*780\*\*: put \*\*No;Oerw\*\* in "Got Corn"

- Row \*\*899\*\*: put \*\*No;Xian\*\* in "Got Corn"

- Row \*\*1360\*\*: put \*\*No;Xian\*\* in "Got Corn"

- Row \*\*1445\*\*: put \*\*No;Sey\*\* in "Got Corn"

- Row \*\*1652\*\*: put \*\*No;Sho\*\* in "Got Corn"

- Row \*\*2209\*\*: put \*\*No;Piep\*\* in "Got Corn"

3.(Context) We will also update the column \*\*Context\*\* for the row \*\*2209\*\* by replacing the value by \*\*Intrusion;Obse\*\*

```{r Remarks - not open, echo=FALSE}

library(data.table)

# Check if Bex is a data.table

if (!is.data.table(Bex)) {

setDT(Bex)

}

# Ensure the necessary columns exist and initialize them if they don't

if (!("Audience" %in% names(Bex))) {

Bex[, Audience := rep(NA\_character\_, .N)]

}

if (!("Got Corn" %in% names(Bex))) {

Bex[, `Got Corn` := rep(NA\_character\_, .N)]

}

if (!("Context" %in% names(Bex))) {

Bex[, Context := rep("No Context", .N)]

}

# Define updates

corn\_updates <- c("No;Unk", "No;Kom", "No;Nge", "No;Oerw", "No;Xian", "No;Xian", "No;Sey", "No;Sho", "No;Piep")

rows\_to\_update <- c(320, 377, 632, 780, 899, 1360, 1445, 1652, 2209)

# Update 'Audience' for rows 320 and 321

Bex[c(320, 321), Audience := "Sey;Piep;Sirk;Oup;Ome"]

# Update 'Got Corn' for specified rows

Bex[rows\_to\_update, `Got Corn` := corn\_updates]

# Update 'Context' for row 2209

Bex[2209, Context := "Intrusion;Obse"]

# Print modified rows to verify

print(Bex[unique(c(320, 321, rows\_to\_update, 2209)), .(Audience, `Got Corn`, Context)])

#Print rows after updates to verify

print(Bex[c(320, 321, 377, 632, 780, 899, 1360, 1445, 1652, 2209), .(Audience, `Got Corn`, Context)])

```

\* \*\*Remarks - steal(8x)\*\*

Rows: 130, 417, 893, 909, 1070, 1344, 1393, 1947

-Content: Attempts or success in stealing food

1. I want to update the column \*\*SpecialBehaviour\*\* for the following columns

- Row \*\*130\*\*: put \*\*ASF;Buk\*\* in "SpecialBehaviour"

- Row \*\*417\*\*: put \*\*ASF;Buk\*\* in "SpecialBehaviour"

- Row \*\*893\*\*: put \*\*SF;Xian\*\* in "SpecialBehaviour"

- Row \*\*909\*\*: put \*\*SF;Pom\*\* in "SpecialBehaviour"

- Row \*\*1070\*\*: put \*\*ASF;Sey\*\* in "SpecialBehaviour"

- Row \*\*1344\*\*: put \*\*ASF;Sey\*\* in "SpecialBehaviour"

- Row \*\*1393\*\*: put \*\*ASF;Sey\*\* in "SpecialBehaviour"

- Row \*\*1947\*\*: put \*\*ASF;Xia\*\* in "Special Behaviour"

2. I want to update the column \*\*Got Corn\*\* for the following columns

- Row \*\*417\*\*; put \*\*No;Kom\*\* in "Got Corn"

- Row \*\*893\*\*: put \*\*No;Pom\*\* in "Got Corn"

- Row \*\*909\*\*: put \*\*No;Xian\*\* in "Got Corn"

3. Replace the values that have been treated with \*\*Treated\*\* in the column "Remarks"

```{r Remarks - steal, echo=FALSE}

# Load data.table library

library(data.table)

# Ensure Bex is a data.table

if (!is.data.table(Bex)) {

setDT(Bex)

}

# Initialize necessary columns if they do not exist

if (!("SpecialBehaviour" %in% names(Bex))) {

Bex[, SpecialBehaviour := rep("No", .N)] # Default value for all rows

}

if (!("Got Corn" %in% names(Bex))) {

Bex[, `Got Corn` := rep("Yes", .N)] # Default value for all rows

}

if (!("Remarks" %in% names(Bex))) {

Bex[, Remarks := rep(NA\_character\_, .N)] # Default value for all rows

}

# Print rows before the updates for "steal" scenario

print(Bex[c(130, 417, 893, 909, 1070, 1344, 1393, 1947), .(Remarks, SpecialBehaviour, `Got Corn`)])

# Define the updates

special\_behaviour\_updates <- c("ASF;Buk", "ASF;Buk", "SF;Xian", "SF;Pom", "ASF;Sey", "ASF;Sey", "ASF;Sey", "ASF;Xia")

rows\_special\_behaviour <- c(130, 417, 893, 909, 1070, 1344, 1393, 1947)

# Update 'SpecialBehaviour'

for (i in seq\_along(rows\_special\_behaviour)) {

Bex[rows\_special\_behaviour[i], SpecialBehaviour := special\_behaviour\_updates[i]]

}

# Update 'Got Corn' for specific rows

corn\_updates\_specific <- list(

`417` = "No;Kom",

`893` = "No;Pom",

`909` = "No;Xian"

)

for (row in names(corn\_updates\_specific)) {

Bex[as.numeric(row), `Got Corn` := corn\_updates\_specific[[row]]]

}

# Mark 'Remarks' as 'Treated'

Bex[rows\_special\_behaviour, Remarks := "Treated"]

# Print rows after updates to verify

print(Bex[c(130, 417, 893, 909, 1070, 1344, 1393, 1947), .(Remarks, SpecialBehaviour, `Got Corn`)])

```

\* \*\*Remarks - trial (8x)\*\*

Rows:98 660 860 962 1080 1082 1919 2773

```{r Remarks - trial, echo=FALSE}

# Check if the necessary columns exist and initialize them if they don't

if (!("Remarks" %in% names(Bex))) {

Bex[, Remarks := rep(NA\_character\_, .N)] # Default for all rows if column does not exist

}

if (!"Processed" %in% names(Bex)) {

Bex[, Processed := rep("No", .N)] # Default for all rows if column does not exist

}

# Define the keyword to search for in the Remarks column

keyword <- "trial"

# Find rows where the Remarks column contains the keyword (case-insensitive)

rows\_with\_keyword <- which(str\_detect(tolower(Bex$Remarks), tolower(keyword)))

# Print rows before the updates for clarity

if (length(rows\_with\_keyword) > 0) {

print(Bex[rows\_with\_keyword, .(Remarks, Processed)])

}

# Apply updates if any rows contain the keyword

if (length(rows\_with\_keyword) > 0) {

Bex[rows\_with\_keyword, Processed := "Yes"] # Update 'Processed' to 'Yes'

}

# Print rows after updates to verify changes

if (length(rows\_with\_keyword) > 0) {

print(Bex[rows\_with\_keyword, .(Remarks, Processed)])

}

# Print the count of rows affected

cat("Total number of occurrences of the keyword '", keyword, "': ", length(rows\_with\_keyword), "\n")

```

-Content: Each row has to be treated in a unique way since this key word was not used in the same way for each trial

1. Row \*\*98\*\*: put "First trial" in \*\*Context\*\*

2. Row \*\*660\*\*: put "Aggression" in \*\*Context\*\*

3. Row \*\*860\*\*: put "Intrusion;Buk" in \*\*Context\*\*

4. Row \*\*962\*\*: put "Buk;Ndaw" in \*\*IdIndividual1\*\* instead of "Buk"

5. Row \*\*1079\*\* and \*\*1080\*\*: put "Oort" in \*\*IntruderID\*\*

6. Row \*\*1079\*\* and \*\*1080\*\*: put "Intrusion;Oort" in \*\*Context\*\*

7. Row \*\*1082\*\*: put "Mount;Xia" in \*\*SpecialBehaviour\*\*

8. Row \*\*1919\*\*: delete the row

9. Replace the Remarks for the rows 98,660,860,962,1080,1082,1919,2773 with \*\*Treated\*\*

10.Make sure the code is safe for multiple run, especially when we delete a row

11. Display these rows to check the changes

```{r Remarks - trial cleaning, echo=FALSE}

# If Bex isn't already a data.table, convert it

if (!is.data.table(Bex)) {

setDT(Bex)

}

# Specific updates for each row based on previous feedback

updates <- list(

`98` = list(Context = "First trial", Remarks = "Treated"),

`660` = list(Context = "Aggression", Remarks = "Treated"),

`860` = list(Context = "Intrusion;Buk", Remarks = "Treated"),

`962` = list(IDIndividual1 = "Buk;Ndaw", Remarks = "Treated"),

`1079` = list(Context = "Intrusion;Oort", IntruderID = "Oort", Remarks = "Treated"),

`1080` = list(Context = "Intrusion;Oort", IntruderID = "Oort", Remarks = "Treated"),

`1082` = list(SpecialBehaviour = "Mount;Xia", Remarks = "Treated"),

`1919` = list(Remarks = "Deleted") # This will mark as deleted before removal

)

# Apply updates, avoiding updating already "Treated" entries

for (row in names(updates)) {

if (as.integer(row) <= nrow(Bex) && Bex$Remarks[as.integer(row)] != "Treated") {

Bex[as.integer(row), (names(updates[[row]])) := updates[[row]]]

}

}

# Remove row 1919 if it is marked as "Deleted" and exists in the data table

if ("1919" %in% names(updates) && Bex$Remarks[1919] == "Deleted" && 1919 <= nrow(Bex)) {

Bex <- Bex[-1919, ]

setkey(Bex, NULL) # Reset row numbering after deletion

}

# Display the rows after modifications, excluding deleted ones

rows\_to\_display <- setdiff(c(98, 660, 860, 962, 1079, 1080, 1082), 1919)

valid\_rows\_to\_display <- rows\_to\_display[rows\_to\_display <= nrow(Bex)]

print(Bex[valid\_rows\_to\_display, .(Remarks, Context, IDIndividual1, IntruderID, SpecialBehaviour)])

```

\* \*\*Remarks - numerical value (68x)\*\*

Rows:32, 33, 34, 35, 36, 37, 38, 39, 40, 49, 88, 89, 138, 159, 389, 392, 613, 851, 1090, 1176, 1178, 1180, 1277, 1338, 1473, 1481, 1545, 1575, 1595, 1624, 1692, 1700, 1701, 1706, 1796, 1807, 1815, 1866, 1870, 1874, 1882, 1915, 1925, 2038, 2039, 2059, 2062, 2066, 2098, 2127, 2140, 2148, 2162, 2166, 2194, 2220, 2270, 2312, 2348, 2382, 2397, 2445, 2471, 2491, 2548, 2591, 2631, 2745

```{r Remarks - Numerical value, echo=FALSE}

# Check if Bex dataframe is available

if (!("Bex" %in% ls())) {

cat("Error: Dataframe 'Bex' not found.\n")

} else {

# Define the pattern to search for numerical values

# The pattern \d+ matches one or more digits

pattern <- "\\d+"

# Find rows where the Remarks column contains the pattern (case-insensitive)

rows\_with\_numerical\_values <- which(str\_detect(tolower(Bex$Remarks), pattern))

# Check if any rows were found

if (length(rows\_with\_numerical\_values) == 0) {

cat("No numerical values found in the Remarks column.\n")

} else {

# Print all the row numbers that contain numerical values

cat("Rows with numerical values:", toString(rows\_with\_numerical\_values), "\n")

# Print the content of each row that contains numerical values

for (row in rows\_with\_numerical\_values) {

print(paste("Row", row, ": ", Bex$Remarks[row]))

}

# Print the count of rows

cat("Total number of occurrences of numerical values: ", length(rows\_with\_numerical\_values), "\n")

}

}

```

1. I want to replace the value in \*\*DyadDistance\*\* by the value that is found in "Remarks" for the following rows: \*\*32, 33, 34, 35, 36, 37, 38, 39, 40\*\*

2. Row \*\*49\*\*: Put "Scared;Sirk by Sey" in \*\*SpecialBehaviour\*\*

3. Row \*\*88\*\* and \*\*89\*\* replace the value in \*\*DyadDistance\*\* by "6m"

4. Row \*\*138\*\*: Put "SF;Oerw" in \*\*SpecialBehaviour\*\*

5. Row \*\*389\*\* and \*\*392\*\*: replace the value in \*\*DyadDistance\*\* by "1m"

6. Row \*\*613\*\*: Put "SF;Kom;1" in \*\*SpecialBehaviour\*\*

7. Row \*\*1090\*\*: replace the value in \*\*DyadDistance\*\* by "1m"

8. Row \*\*1176\*\*: Put "SF;Xian;1" in \*\*SpecialBehaviour\*\*

9. Row \*\*1178\*\*: replace the value in \*\*DyadDistance\*\* by "1m"

10. Row \*\*1338\*\*:Put "SF;Xia;2" in \*\*SpecialBehaviour\*\*

11. Row \*\*1473\*\*:Put "AP0;Gris" in \*\*Context\*\*

12. Row \*\*1473\*\*:Put "Xian;Pom" in \*\*IDIndividual1\*\*

13. Row \*\*1595\*\*: Put "SF;Sey" in \*\*SpecialBehaviour\*\*

14. Row \*\*1701\*\*: Put "SF;Gran" in \*\*SpecialBehaviour\*\*

15. Row \*\*1701\*\*: Put "Intrusion;Gran" in \*\*Context\*\*

16. Row \*\*1796\*\*: Put "No;Pom" in \*\*Got Corn\*\*

17. Row \*\*1815\*\*: Put "BGE" in \*\*Context\*\*

18. Row \*\*1915\*\*: Put "BGE" in \*\*Context\*\*

19. Row \*\*2348\*\*: Put "AP;MC" in \*\*SpecialBehaviour\*\*

20. Row \*\*2591\*\*: Put "SF;Gubh;Ndaw" in \*\*SpecialBehaviour\*\*

21. Row \*\*2631\*\*: Put "Aggression" in \*\*DyadResponse\*\*

22. Replace the values in the colum Remarks by "Treated" for these rows: \*\*32, 33, 34, 35, 36, 37, 38, 39, 40, 49, 88, 89, 138, 159, 389, 392, 613, 851, 1090, 1176, 1178, 1180, 1277, 1338, 1473, 1545, 1575, 1595, 1624, 1692, 1700, 1701, 1706, 1796, 1807, 1815, 1866, 1870, 1874, 1882, 1915, 1925, 2038, 2039, 2059, 2062, 2066, 2098, 2127, 2140, 2148, 2162, 2166, 2194, 2220, 2270, 2312, 2348, 2382, 2397, 2445, 2471, 2491, 2548, 2591, 2631, 2745\*\*

23. Make sure the code is safe for multiple run

```{r Remarks - Numerical Values Cleaning, echo=FALSE}

# Check if Bex dataframe is available

if (!("Bex" %in% ls())) {

cat("Error: Dataframe 'Bex' not found.\n")

} else {

# Define and apply specific updates

# Updates for DyadDistance based on direct values or extracted values

dyad\_distance\_direct\_updates <- setNames(

c("6m", "6m", "1m", "1m", "1m", "1m"),

c(88, 89, 389, 392, 1090, 1178)

)

Bex[names(dyad\_distance\_direct\_updates), DyadDistance := dyad\_distance\_direct\_updates]

# Automatic extraction of distance values from remarks for specific rows

Bex[32:40, DyadDistance := gsub("\\D", "", Remarks)]

# Other specific updates

updates <- list(

`49` = list(SpecialBehaviour = "Scared;Sirk by Sey"),

`138` = list(SpecialBehaviour = "SF;Oerw"),

`613` = list(SpecialBehaviour = "SF;Kom;1"),

`1176` = list(SpecialBehaviour = "SF;Xian;1"),

`1338` = list(SpecialBehaviour = "SF;Xia;2"),

`1595` = list(SpecialBehaviour = "SF;Sey"),

`1701` = list(SpecialBehaviour = "SF;Gran", Context = "Intrusion;Gran"),

`1473` = list(Context = "AP0;Gris", IDIndividual1 = "Xian;Pom"),

`1796` = list(`Got Corn` = "No;Pom"),

`1815` = list(Context = "BGE"),

`1915` = list(Context = "BGE"),

`2348` = list(SpecialBehaviour = "AP;MC"),

`2591` = list(SpecialBehaviour = "SF;Gubh;Ndaw"),

`2631` = list(DyadResponse = "Aggression")

)

# Apply updates

for (row\_id in names(updates)) {

Bex[as.integer(row\_id), (names(unlist(updates[[row\_id]]))) := unlist(updates[[row\_id]])]

}

# Mark Remarks as 'Treated' for specified rows

treated\_rows <- c(32:40, 49, 88, 89, 138, 159, 389, 392, 613, 851, 1090, 1176, 1178, 1180, 1277, 1338, 1473, 1545, 1575, 1595, 1624, 1692, 1700, 1701, 1706, 1796, 1807, 1815, 1866, 1870, 1874, 1882, 1915, 1925, 2038, 2039, 2059, 2062, 2066, 2098, 2127, 2140, 2148, 2162, 2166, 2194, 2220, 2270, 2312, 2348, 2382, 2397, 2445, 2471, 2491, 2548, 2591, 2631, 2745)

Bex[treated\_rows, Remarks := "Treated"]

# Confirm the changes

print(Bex[treated\_rows, .(Remarks, DyadDistance, SpecialBehaviour, Context, `Got Corn`, IDIndividual1)])

}

```

\* They are a certain amount of comments indicating than an individual came after 30 seconds, I decided for now to not treat them as I already have a lot of variables and this information even if important is not very consistent in the way it got reported

\* I decided to keep row 1481 as it is to see how to treat it later

\* \*\*Remarks - intrude (26x)\*\*

Rows: 136, 142, 600, 618, 804, 936, 1011, 1012, 1069, 1113, 1174, 1257, 1258, 1271, 1272, 1299, 1370, 1486, 1533, 1880, 1920, 2221, 2372, 2376, 2687, 2769

-Content: Rows where an individual intruded or attempted to make an intrusion during a trial

```{r Remarks - intrude, echo=FALSE}

# Check if Bex dataframe is available

if (!("Bex" %in% ls())) {

cat("Error: Dataframe 'Bex' not found.\n")

} else {

# Define the keyword to search for in the Remarks column

keyword <- "intrude"

# Find rows where the Remarks column contains the keyword (case-insensitive)

rows\_with\_keyword <- which(str\_detect(tolower(Bex$Remarks), tolower(keyword)))

# Check if any rows were found

if (length(rows\_with\_keyword) == 0) {

cat("No occurrences of the keyword '", keyword, "' found in the Remarks column.\n")

} else {

# Print all the row numbers that contain the keyword

cat("Rows with the keyword '", keyword, "':", toString(rows\_with\_keyword), "\n")

# Print the content of each row that contains the keyword

for (row in rows\_with\_keyword) {

print(paste("Row", row, ": ", Bex$Remarks[row]))

}

# Print the count of rows

cat("Total number of occurrences of the keyword '", keyword, "': ", length(rows\_with\_keyword), "\n")

}

}

```

1. Row \*\*136\*\*: Put "Oerw" in \*\*IntruderID\*\* and "Intrusion;Oerw" in \*\*Context\*\*

2. Row \*\*142\*\*: Put "AttemptIntrusion;Kom" in \*\*Context\*\*

3. Row \*\*600\*\*: Put "Intrusion;Obse" in \*\*Context\*\*

4. Row \*\*618\*\*: Put "Kom" in \*\*IntruderID\*\* and "Intrusion;Kom" in \*\*Context\*\*

5. Row \*\*618\*\*: Put "Yes;Sirk;1" in the column \*\*GotCorn\*\*

6. Row \*\*804\*\*: Put "Sho" in the column \*\*IntruderID\*\* and "Intrusion;Sho" in \*\*Context\*\*

7. Row \*\*936\*\*: Put "Oerw;Oupa" in the column \*\*IntruderID\*\* and "Intrusion;Oerw;Oupa" in \*\*Context\*\*

8. Row \*\*1011\*\*: Put "Obse" in the column \*\*IntruderID\*\* and "Intrusion;Obse" in \*\*Context\*\*

9. Row \*\*1011\*\*: Put "No;Piep" in the column \*\*GotCorn\*\*

10.Row \*\*1012\*\*: Put "Obse" in the column \*\*IntruderID\*\* and "Intrusion;Obse" in \*\*Context\*\*

11.Row \*\*1012\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

12.Row \*\*1069\*\*: Put "Oort" in \*\*IntruderID\*\* and "Intrusion;Oort" in \*\*Context\*\*

13.Row \*\*1113\*\*: Put "Oort" in \*\*IntruderID\*\* and "ST;Oort;Sirk" in \*\*Context\*\*

14.Row \*\*1174\*\*: Put "AttemptIntrusion;Gaya" in \*\*Context\*\*

15.Row \*\*1257\*\*: Put "Obse" in \*\*IntruderID\*\* and "Intrusion;Obse" in \*\*Context\*\*

16.Row \*\*1258\*\*: Put "Obse;Sey" in \*\*IntruderID\*\* and "Intrusion;Obse;Sey" in \*\*Context\*\*

17.Row \*\*1271\*\*: Put "Piep" in \*\*IntruderID\*\* and "Intrusion;Piep" in \*\*Context\*\*

18.Row \*\*1272\*\*: Put "Piep" in \*\*IntruderID\*\* and "Intrusion;Piep" in \*\*Context\*\*

19.Row \*\*1299\*\*: Put "Gri" in \*\*IntruderID\*\* and "Intrusion;Gri" in \*\*Context\*\*

20.Row \*\*1370\*\*: Put "Oort" in \*\*IntruderID\*\* and "Intrusion;Oort" in \*\*Context\*\*

21.Row \*\*1486\*\*: Put "Sey" in \*\*IntruderID\*\* and "Intrusion;Sey" in \*\*Context\*\*

22.Row \*\*1533\*\*: Put "AttemptIntrusion;Xia" in \*\*Context\*\*

23.Row \*\*1880\*\*: Put "Ghid" in \*\*IntruderID\*\* and "Intrusion;Ghid" in \*\*Context\*\*

24.Row \*\*1880\*\*: Put "Sho;Ginq" in \*\*IdIndividual1\*\*

25.Row \*\*1920\*\*: Put "Oerw" in \*\*IntruderID\*\* and "Intrusion;Oerw" in \*\*Context\*\*

26.Row \*\*2221\*\*: Put "Oerw" in \*\*IntruderID\*\* and "Intrusion;Oerw" in \*\*Context\*\*

27.Row \*\*2372\*\*: Put "Buk" in \*\*IntruderID\*\* and "Intrusion;Buk" in \*\*Context\*\*

28.Row \*\*2376\*\*: Put "Buk" in \*\*IntruderID\*\* and "Intrusion;Buk" in \*\*Context\*\*

29.Row \*\*2687\*\*: Put "Tolerance;Intrusion" in \*\*DyadResponse\*\*

30.Row \*\*2687\*\*: Put "Oerw" in \*\*IntruderID\*\* and "Intrusion;Oerw" in \*\*Context\*\*

31.Row \*\*2769\*\*: Put "Sey" in \*\*IntruderID\*\* and "Intrusion;Sey" in \*\*Context\*\*

32. Make sure the code is safe for multiple run and check for any syntax error

```{r Remarks - intrude cleaning, echo=FALSE}

# Check if Bex dataframe is available

if (!("Bex" %in% ls())) {

cat("Error: Dataframe 'Bex' not found.\n")

} else {

library(stringr)

# Define updates for IntruderID and Context

intruderID\_updates <- c("136" = "Oerw", "618" = "Kom", "804" = "Sho", "936" = "Oerw;Oupa",

"1011" = "Obse", "1012" = "Obse", "1069" = "Oort", "1113" = "Oort",

"1257" = "Obse", "1258" = "Obse;Sey", "1271" = "Piep", "1272" = "Piep",

"1299" = "Gri", "1370" = "Oort", "1486" = "Sey", "1880" = "Ghid",

"1920" = "Oerw", "2221" = "Oerw", "2372" = "Buk", "2376" = "Buk",

"2687" = "Oerw", "2769" = "Sey")

context\_updates <- c("136" = "Intrusion;Oerw", "142" = "AttemptIntrusion;Kom", "600" = "Intrusion;Obse",

"618" = "Intrusion;Kom", "804" = "Intrusion;Sho", "936" = "Intrusion;Oerw;Oupa",

"1011" = "Intrusion;Obse", "1012" = "Intrusion;Obse", "1069" = "Intrusion;Oort",

"1113" = "ST;Oort;Sirk", "1174" = "AttemptIntrusion;Gaya", "1257" = "Intrusion;Obse",

"1258" = "Intrusion;Obse;Sey", "1271" = "Intrusion;Piep", "1272" = "Intrusion;Piep",

"1299" = "Intrusion;Gri", "1370" = "Intrusion;Oort", "1486" = "Intrusion;Sey",

"1533" = "AttemptIntrusion;Xia", "1880" = "Intrusion;Ghid", "1920" = "Intrusion;Oerw",

"2221" = "Intrusion;Oerw", "2372" = "Intrusion;Buk", "2376" = "Intrusion;Buk",

"2687" = "Tolerance;Intrusion", "2769" = "Intrusion;Sey")

# Apply updates for IntruderID and Context

for (row in names(intruderID\_updates)) {

row\_num <- as.numeric(row)

if (row\_num <= nrow(Bex) && !is.na(Bex$Remarks[row\_num])) {

Bex$IntruderID[row\_num] <- intruderID\_updates[[row]]

Bex$Context[row\_num] <- context\_updates[[row]]

}

}

# Additional updates as previously defined (SpecialBehaviour, Got Corn, IDIndividual1, etc.)

# ...

# Update DyadDistance based on values in Remarks

rows\_for\_dyaddistance\_update <- c(32:40, 88, 89, 389, 392, 1090, 1178)

for (row in rows\_for\_dyaddistance\_update) {

if (row <= nrow(Bex)) {

new\_value <- str\_extract(Bex$Remarks[row], "\\d+m") # Extract numerical value followed by 'm'

if (!is.na(new\_value) && Bex$DyadDistance[row] != new\_value) {

Bex$DyadDistance[row] <- new\_value

}

}

}

# Replace values in the Remarks column by "Treated" for specified rows

rows\_for\_remarks\_update <- c(32:40, 49, 88, 89, 138, 159, 389, 392, 613, 851, 1090, 1176, 1178, 1180, 1277, 1338, 1473, 1545, 1575, 1595, 1624, 1692, 1700, 1701, 1706, 1796, 1807, 1815, 1866, 1870, 1874, 1882, 1915, 1925, 2038, 2039, 2059, 2062, 2066, 2098, 2127, 2140, 2148, 2162, 2166, 2194, 2220, 2270, 2312, 2348, 2382, 2397, 2445, 2471, 2491, 2548, 2591, 2631, 2745)

for (row in rows\_for\_remarks\_update) {

if (row <= nrow(Bex) && Bex$Remarks[row] != "Treated") {

Bex$Remarks[row] <- "Treated"

}

}

# Display modified rows to verify changes

modified\_rows <- unique(c(rows\_for\_dyaddistance\_update, as.numeric(names(special\_behaviour\_updates)), as.numeric(names(context\_updates)), as.numeric(names(id\_updates)), as.numeric(names(got\_corn\_updates)), rows\_for\_remarks\_update))

modified\_rows <- modified\_rows[modified\_rows <= nrow(Bex)]

print(Bex[modified\_rows, ])

}

```

\* \*\*Remarks - open ( x)\*\*

Rows: 3, 4, 12, 247, 280, 406, 419, 490, 768, 798, 924, 938, 991, 1076, 1114, 1127, 1211, 1330, 1331, 1432, 1452, 1466, 1472, 1523, 1526, 1585, 1710, 1785, 1827, 1971, 2037, 2107, 2178, 2192, 2370, 2384, 2472, 2676

-Content: Mostly cases where one or the two boxes did not open

```{r Remarks - open, echo=FALSE}

# Check if Bex dataframe is available

if (!("Bex" %in% ls())) {

cat("Error: Dataframe 'Bex' not found.\n")

} else {

# Define the keyword to search for in the Remarks column

keyword <- "open"

# Find rows where the Remarks column contains the keyword (case-insensitive)

rows\_with\_keyword <- which(str\_detect(tolower(Bex$Remarks), tolower(keyword)))

# Check if any rows were found

if (length(rows\_with\_keyword) == 0) {

cat("No occurrences of the keyword '", keyword, "' found in the Remarks column.\n")

} else {

# Print all the row numbers that contain the keyword

cat("Rows with the keyword '", keyword, "':", toString(rows\_with\_keyword), "\n")

# Print the content of each row that contains the keyword

for (row in rows\_with\_keyword) {

print(paste("Row", row, ": ", Bex$Remarks[row]))

}

# Print the count of rows

cat("Total number of occurrences of the keyword '", keyword, "': ", length(rows\_with\_keyword), "\n")

}

}

```

1.Row \*\*3\*\*: Put "No;Nge" in \*\*GotCorn\*\*

2.Row \*\*12\*\*: Put "VO;Oerw;RT;NGE" in \*\*SpecialBehaviour\*\*

3.Row \*\*247\*\*: Delete the row

4.Row \*\*280\*\*: Put "No;Xian" in \*\*GotCorn\*\*

5.Row \*\*280\*\*: Put "Aggression;Pom" in \*\*Context\*\*

6.Row \*\*419\*\*: Put "No;Pom" in \*\*GotCorn\*\*

7.Row \*\*490\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\*

8.Row \*\*490\*\*: Put "No;Piep" in \*\*GotCorn\*\*

9.Row \*\*768\*\*: Put "No;Kom" in \*\*GotCorn\*\*

10.Row \*\*798\*\*: Delete the row

11.Row \*\*938\*\*: Put "No;Kom" in \*\*GotCorn\*\*

12.Row \*\*991\*\*: Put "No;Sey" in \*\*GotCorn\*\*

13.Row \*\*991\*\*: Put "Obse" in \*\*IntruderID\*\* and "Intrusion;Obse" in \*\*Context\*\*

14.Row \*\*1076\*\*: Put "EatSameBox" in \*\*SpecialBehaviour\*\*

15.Row \*\*1114\*\*: Put "No;Xian" in \*\*GotCorn\*\*

16.Row \*\*1211\*\*: Put "No;Piep" in \*\*GotCorn\*\*

17.Row \*\*1330\*\*: Put "No;Kom" in \*\*GotCorn\*\*

18.Row \*\*1331\*\*: Put "No;Kom" in \*\*GotCorn\*\* and "SF;Oort" in \*\*SpecialBehaviour\*\*

19.Row \*\*1432\*\*: Put "No;Kom" in \*\*GotCorn\*\*

20.Row \*\*1432\*\*: Put "Sey" in \*\*IntruderID\*\*

21.Row \*\*1452\*\*: Put "No;Sey" in \*\*GotCorn\*\*

22.Row \*\*1466\*\*: Put "No;Piep" in \*\*GotCorn\*\*

23.Row \*\*1523\*\*: Put "No;Pom" in \*\*GotCorn\*\*

24.Row \*\*1526\*\*: Put "No;Pom" in \*\*GotCorn\*\*

25.Row \*\*1526\*\*: Put "AP;Pom;FL;Xian" in \*\*SpecialBehaviour\*\*

26.Row \*\*1585\*\*: Delete Row

27.Row \*\*1785\*\*: Put "No;Pom" in \*\*GotCorn\*\*

28.Row \*\*1971\*\*: Put "No;Oerw" in \*\*GotCorn\*\*

29.Row \*\*2037\*\*: Put "No;Piep" in \*\*GotCorn\*\* and "SF;Xia" in \*\*SpecialBehaviour\*\*

30.Row \*\*2370\*\*: Put "No;Sho" in \*\*GotCorn\*\*

31.Row \*\*2472\*\*: Put "No;Ginq" in \*\*GotCorn\*\*

32.Row \*\*2676\*\*: Put "No;Piep" in \*\*GotCorn\*\*

33.Check for multiple run especially for the rows that will have been deleted and display the rows that have ben changed

34.Replace the remarks by "Treated" for the following rows:3, 4, 12, 247, 280, 406, 419, 490, 768, 798, 924, 938, 991, 1076, 1114, 1127, 1211, 1330, 1331, 1432, 1452, 1466, 1472, 1523, 1526, 1585, 1710, 1785, 1827, 1971, 2037, 2107, 2178, 2192, 2370, 2384, 2472, 2676

```{r Remarks - open cleaning, echo=FALSE}

# Check if Bex dataframe is available

if (!("Bex" %in% ls())) {

cat("Error: Dataframe 'Bex' not found.\n")

} else {

# Define updates for each column

got\_corn\_updates <- c("3" = "No;Nge", "12" = "VO;Oerw;RT;NGE", "280" = "No;Xian", "419" = "No;Pom", "490" = "SF;Xia", "768" = "No;Kom", "938" = "No;Kom", "991" = "No;Sey", "1076" = "EatSameBox", "1114" = "No;Xian", "1211" = "No;Piep", "1330" = "No;Kom", "1331" = "No;Kom", "1432" = "No;Kom", "1452" = "No;Sey", "1466" = "No;Piep", "1523" = "No;Pom", "1526" = "No;Pom", "1785" = "No;Pom", "1971" = "No;Oerw", "2037" = "No;Piep", "2370" = "No;Sho", "2472" = "No;Ginq", "2676" = "No;Piep")

special\_behaviour\_updates <- c("12" = "VO;Oerw;RT;NGE", "490" = "SF;Xia", "1331" = "SF;Oort", "1526" = "AP;Pom;FL;Xian", "2037" = "SF;Xia")

intruder\_id\_updates <- c("991" = "Obse", "1432" = "Sey")

context\_updates <- c("280" = "Aggression;Pom", "991" = "Intrusion;Obse")

# Apply updates

for (row in names(got\_corn\_updates)) {

row\_num <- as.numeric(row)

if (row\_num <= nrow(Bex) && !is.na(Bex$`Got Corn`[row\_num]) && Bex$`Got Corn`[row\_num] != got\_corn\_updates[[row]]) {

Bex$`Got Corn`[row\_num] <- got\_corn\_updates[[row]]

}

}

for (row in names(special\_behaviour\_updates)) {

row\_num <- as.numeric(row)

if (row\_num <= nrow(Bex) && !is.na(Bex$SpecialBehaviour[row\_num]) && Bex$SpecialBehaviour[row\_num] != special\_behaviour\_updates[[row]]) {

Bex$SpecialBehaviour[row\_num] <- special\_behaviour\_updates[[row]]

}

}

for (row in names(intruder\_id\_updates)) {

row\_num <- as.numeric(row)

if (row\_num <= nrow(Bex) && !is.na(Bex$IntruderID[row\_num]) && Bex$IntruderID[row\_num] != intruder\_id\_updates[[row]]) {

Bex$IntruderID[row\_num] <- intruder\_id\_updates[[row]]

}

}

for (row in names(context\_updates)) {

row\_num <- as.numeric(row)

if (row\_num <= nrow(Bex) && !is.na(Bex$Context[row\_num]) && Bex$Context[row\_num] != context\_updates[[row]]) {

Bex$Context[row\_num] <- context\_updates[[row]]

}

}

# Delete rows only if they exist

rows\_to\_delete <- c(247, 798, 1585)

rows\_to\_delete <- rows\_to\_delete[rows\_to\_delete <= nrow(Bex)]

Bex <- Bex[-rows\_to\_delete, ]

# Replace 'Remarks' values with 'Treated' for specific rows if not already done

rows\_for\_remarks\_update <- c(3, 12, 280, 419, 490, 768, 938, 991, 1076, 1114, 1211, 1330, 1331, 1432, 1452, 1466, 1523, 1526, 1785, 1971, 2037, 2370, 2472, 2676)

for (row in rows\_for\_remarks\_update) {

if (row <= nrow(Bex) && Bex$Remarks[row] != "Treated") {

Bex$Remarks[row] <- "Treated"

}

}

# Display modified rows

modified\_rows <- unique(c(as.numeric(names(got\_corn\_updates)), as.numeric(names(special\_behaviour\_updates)), as.numeric(names(intruder\_id\_updates)), as.numeric(names(context\_updates)), rows\_for\_remarks\_update))

modified\_rows <- modified\_rows[modified\_rows <= nrow(Bex)]

print(Bex[modified\_rows, ])

}

```

\* \*\*Remarks - audience (43x)\*\*

Rows:72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 103, 104, 105, 106, 107, 108, 109, 110, 787, 1877, 2767, 2768, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787

-Content: Mostly cases where the audience was unknown

```{r, Remarks - audience, echo=FALSE}

# Check if Bex dataframe is available

if (!("Bex" %in% ls())) {

cat("Error: Dataframe 'Bex' not found.\n")

} else {

# Define the keyword to search for in the Remarks column

keyword <- "audience"

# Find rows where the Remarks column contains the keyword (case-insensitive)

rows\_with\_keyword <- which(str\_detect(tolower(Bex$Remarks), tolower(keyword)))

# Check if any rows were found

if (length(rows\_with\_keyword) == 0) {

cat("No occurrences of the keyword '", keyword, "' found in the Remarks column.\n")

} else {

# Print all the row numbers that contain the keyword

cat("Rows with the keyword '", keyword, "':", toString(rows\_with\_keyword), "\n")

# Print the content of each row that contains the keyword

for (row in rows\_with\_keyword) {

print(paste("Row", row, ": ", Bex$Remarks[row]))

}

# Print the count of rows

cat("Total number of occurrences of the keyword '", keyword, "': ", length(rows\_with\_keyword), "\n")

}

}

```

1.Row \*\*2786\*\*: Put "ASF;Sey" in \*\*SpecialBehaviour\*\*

2.Rows:\*\*72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 103, 104, 105, 106, 107, 108, 109, 110, 2767, 2768, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787\*\*, replace the NA's by "No Audience" in the column \*\*Audience\*\*

3.Row \*\*1877\*\*: Put "No Audience" in \*\*Audience\*\*

4.Replace the remarks by "Treated" for the rows: \*\*72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 103, 104, 105, 106, 107, 108, 109, 110, 787, 1877, 2767, 2768, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787\*\*

5.Make sure the code is safe for multiple run and display the lines where changes have been made

```{r Remarks - Audience cleaning, echo=FALSE}

# Check if Bex dataframe is available

if (!("Bex" %in% ls())) {

cat("Error: Dataframe 'Bex' not found.\n")

} else {

# Update SpecialBehaviour for Row 2786

if (2786 <= nrow(Bex) && Bex$SpecialBehaviour[2786] != "ASF;Sey") {

Bex$SpecialBehaviour[2786] <- "ASF;Sey"

}

# Rows to update 'Audience' column

audience\_rows <- c(72:85, 103:110, 1877, 2767:2787)

# Replace NA's with "No Audience" in 'Audience' column

for (row in audience\_rows) {

if (row <= nrow(Bex) && is.na(Bex$Audience[row])) {

Bex$Audience[row] <- "No Audience"

}

}

# Rows to update 'Remarks' column with 'Treated'

remarks\_rows <- c(72:85, 103:110, 787, 1877, 2767:2787)

# Replace 'Remarks' values with 'Treated'

for (row in remarks\_rows) {

if (row <= nrow(Bex) && Bex$Remarks[row] != "Treated") {

Bex$Remarks[row] <- "Treated"

}

}

# Display the modified rows to verify changes

modified\_rows <- unique(c(2786, audience\_rows, remarks\_rows))

modified\_rows <- modified\_rows[modified\_rows <= nrow(Bex)]

print(Bex[modified\_rows, ])

}

```

\* \*\*Remarks - approach (58x)\*\*

Rows: 325, 348, 520, 792, 865, 869, 890, 920, 984, 1020, 1133, 1256, 1258, 1266, 1378, 1402, 1404, 1406, 1428, 1467, 1518, 1519, 1522, 1573, 1613, 1629, 1630, 1637, 1697, 1750, 1878,1895, 1902, 1904, 1951, 1983, 2095, 2140, 2141, 2143, 2171, 2172, 2198, 2212, 2230, 2260, 2277, 2327, 2378, 2593, 2683, 2688, 2710, 2719, 2757

-Content: Mostly cases where individuals did not approach or approached to late

```{r Remarks - approach, echo=FALSE}

# Check if Bex dataframe is available

if (!("Bex" %in% ls())) {

cat("Error: Dataframe 'Bex' not found.\n")

} else {

# Define the keyword to search for in the Remarks column

keyword <- "approach"

# Find rows where the Remarks column contains the keyword (case-insensitive)

rows\_with\_keyword <- which(str\_detect(tolower(Bex$Remarks), tolower(keyword)))

# Check if any rows were found

if (length(rows\_with\_keyword) == 0) {

cat("No occurrences of the keyword '", keyword, "' found in the Remarks column.\n")

} else {

# Print all the row numbers that contain the keyword

cat("Rows with the keyword '", keyword, "':", toString(rows\_with\_keyword), "\n")

# Print the content of each row that contains the keyword

for (row in rows\_with\_keyword) {

print(paste("Row", row, ": ", Bex$Remarks[row]))

}

# Print the count of rows

cat("Total number of occurrences of the keyword '", keyword, "': ", length(rows\_with\_keyword), "\n")

}

}

```

1.Row \*\*520\*\*: Replace NA by "Piep" in \*\*IDIndividual1\*\*

2.Row \*\*865\*\*: Put "SF;Buk;SC;Ndaw" in \*\*SpecialBehaviour\*\*

3.Row \*\*1428\*\*: Put "No;Kom" in \*\*GotCorn\*\*

4.Row \*\*1522\*\*: Put "No;Pom;Xian" in \*\*GotCorn\*\*

5.Row \*\*1522\*\*: Put "AP;Pom;FL;Xian" in \*\*SpecialBehaviour\*\*

6.Row \*\*1637\*\*: Put "Obse" in \*\*IntruderID\*\* and "Intrusion;Obse" in \*\*Context\*\*

7.Row \*\*1697\*\*: Put "Gris" in \*\*IntruderID\*\* and "Intrusion;Obse" in \*\*Context\*\*

8.Row \*\*1697\*\*: Put "No;Pom;Xian" in \*\*GotCorn\*\*

9.Row \*\*1750\*\*: Put "No;Xian" in \*\*GotCorn\*\*

10.Row \*\*1951\*\*: Put "AT;Sho;Ghid" in \*\*SpecialBehaviour\*\*

11.Row \*\*2141\*\*: Put "Buk;Ndaw" in \*\*IDIndividual1\*\*

12.Row \*\*2141\*\*: Put "Resting" in \*\*Context\*\*

13.Row \*\*2171\*\*: Put "Buk;Ndaw" in \*\*IDIndividual1\*\*

13.Row \*\*2172\*\*: Put "Buk;Ndaw" in \*\*IDIndividual1\*\*

14. Row \*\*2593\*\*: Put "AP;Sey;JA;Sirk" in \*\*SpecialBehaviour\*\*

15. Row \*\*2683\*\*: Put "Intrusion" in \*\*DyadResponse\*\* and "Obse" in \*\*IntruderID\*\* and "Intrusion;Obse" in \*\*Context\*\*

16. Row \*\*2688\*\*: Put "AP;Sey;JA;Sirk" in \*\*SpecialBehaviour\*\*

17. Replace the Remarks by "Treated" in the rows: 325, 348, 520, 792, 865, 869, 890, 920, 984, 1020, 1133, 1256, 1258, 1266, 1378, 1402, 1404, 1406, 1428, 1467, 1518, 1519, 1522, 1573, 1613, 1629, 1630, 1637, 1697, 1750, 1878, 1895, 1902, 1904, 1951, 1983, 2095, 2140, 2141, 2143, 2171, 2172, 2198, 2212, 2230, 2260, 2277, 2327, 2378, 2593, 2683, 2688, 2710, 2719, 2757 18. Make sure the code is safe for multiple run and display the rows where changes where made

```{r Remarks - approach cleaning, echo=FALSE}

# Check if Bex dataframe is available

if (!("Bex" %in% ls())) {

cat("Error: Dataframe 'Bex' not found.\n")

} else {

# Define updates for each column

id\_ind1\_updates <- c("520" = "Piep", "2141" = "Buk;Ndaw", "2171" = "Buk;Ndaw", "2172" = "Buk;Ndaw")

special\_behaviour\_updates <- c("865" = "SF;Buk;SC;Ndaw", "1522" = "AP;Pom;FL;Xian", "1951" = "AT;Sho;Ghid", "2593" = "AP;Sey;JA;Sirk", "2688" = "AP;Sey;JA;Sirk")

got\_corn\_updates <- c("1428" = "No;Kom", "1522" = "No;Pom;Xian", "1697" = "No;Pom;Xian", "1750" = "No;Xian")

intruder\_id\_updates <- c("1637" = "Obse", "1697" = "Gris", "2683" = "Obse")

context\_updates <- c("1637" = "Intrusion;Obse", "1697" = "Intrusion;Obse", "2141" = "Resting", "2683" = "Intrusion;Obse")

dyad\_response\_updates <- c("2683" = "Intrusion")

# Apply updates to the Bex dataframe

for (row in names(id\_ind1\_updates)) {

row\_num <- as.numeric(row)

if (row\_num <= nrow(Bex) && (is.na(Bex$IDIndividual1[row\_num]) || Bex$IDIndividual1[row\_num] != id\_ind1\_updates[[row]])) {

Bex$IDIndividual1[row\_num] <- id\_ind1\_updates[[row]]

}

}

for (row in names(special\_behaviour\_updates)) {

row\_num <- as.numeric(row)

if (row\_num <= nrow(Bex) && (is.na(Bex$SpecialBehaviour[row\_num]) || Bex$SpecialBehaviour[row\_num] != special\_behaviour\_updates[[row]])) {

Bex$SpecialBehaviour[row\_num] <- special\_behaviour\_updates[[row]]

}

}

for (row in names(got\_corn\_updates)) {

row\_num <- as.numeric(row)

if (row\_num <= nrow(Bex) && (is.na(Bex$`Got Corn`[row\_num]) || Bex$`Got Corn`[row\_num] != got\_corn\_updates[[row]])) {

Bex$`Got Corn`[row\_num] <- got\_corn\_updates[[row]]

}

}

for (row in names(intruder\_id\_updates)) {

row\_num <- as.numeric(row)

if (row\_num <= nrow(Bex) && (is.na(Bex$IntruderID[row\_num]) || Bex$IntruderID[row\_num] != intruder\_id\_updates[[row]])) {

Bex$IntruderID[row\_num] <- intruder\_id\_updates[[row]]

}

}

for (row in names(context\_updates)) {

row\_num <- as.numeric(row)

if (row\_num <= nrow(Bex) && (is.na(Bex$Context[row\_num]) || Bex$Context[row\_num] != context\_updates[[row]])) {

Bex$Context[row\_num] <- context\_updates[[row]]

}

}

for (row in names(dyad\_response\_updates)) {

row\_num <- as.numeric(row)

if (row\_num <= nrow(Bex) && (is.na(Bex$DyadResponse[row\_num]) || Bex$DyadResponse[row\_num] != dyad\_response\_updates[[row]])) {

Bex$DyadResponse[row\_num] <- dyad\_response\_updates[[row]]

}

}

# Replace 'Remarks' values with 'Treated'

rows\_for\_remarks\_update <- c(325, 348, 520, 792, 865, 869, 890, 920, 984, 1020, 1133, 1256, 1258, 1266, 1378, 1402, 1404, 1406, 1428, 1467, 1518, 1519, 1522, 1573, 1613, 1629, 1630, 1637, 1697, 1750, 1878, 1895, 1902, 1904, 1951, 1983, 2095, 2140, 2141, 2143, 2171, 2172, 2198, 2212, 2230, 2260, 2277, 2327, 2378, 2593, 2683, 2688, 2710, 2719, 2757)

for (row in rows\_for\_remarks\_update) {

if (row <= nrow(Bex) && Bex$Remarks[row] != "Treated") {

Bex$Remarks[row] <- "Treated"

}

}

# Display modified rows

modified\_rows <- unique(c(as.numeric(names(id\_ind1\_updates)), as.numeric(names(special\_behaviour\_updates)), as.numeric(names(got\_corn\_updates)), as.numeric(names(intruder\_id\_updates)), as.numeric(names(context\_updates)), as.numeric(names(dyad\_response\_updates)), rows\_for\_remarks\_update))

modified\_rows <- modified\_rows[modified\_rows <= nrow(Bex)]

print(Bex[modified\_rows, ])

}

```

\* \*\*Remarks - corn (119x)\*\*

Rows:28, 158, 225, 425, 483, 491, 517, 531, 541, 635, 770, 794, 795, 811, 812, 813, 899, 910, 916, 917, 918, 927, 963, 965, 967, 968, 969, 971, 977, 978, 1010, 1013, 1033, 1038, 1039, 1040, 1041, 1044, 1057, 1072, 1073, 1079, 1080, 1087, 1116, 1120, 1134, 1204, 1207, 1245, 1265, 1289, 1335, 1337, 1339, 1343, 1350, 1352, 1353, 1354, 1357, 1438, 1459, 1511, 1514, 1525, 1536, 1537, 1550, 1551, 1569, 1617, 1639, 1640, 1642, 1741, 1777, 1778, 1885, 1894, 2031, 2035, 2052, 2089, 2090, 2123, 2135, 2244, 2245, 2253, 2254, 2313, 2316, 2341, 2346, 2364, 2382, 2386, 2436, 2442, 2466, 2471, 2479, 2484, 2490, 2515, 2548, 2549, 2559, 2601, 2609, 2621, 2626, 2670, 2675, 2722, 2738, 2741, 2748

-Content:Cases where one invidual got the corn stolen or did not get it

```{r Remarks - ate, echo=FALSE}

# Define the keyword to search for in the Remarks column

keyword <- "corn"

# Find rows where the Remarks column contains the keyword (case-insensitive)

rows\_with\_keyword <- which(str\_detect(tolower(Bex$Remarks), tolower(keyword)))

# Print all the row numbers that contain the keyword and their content

if (length(rows\_with\_keyword) > 0) {

cat("Rows with the keyword '", keyword, "':", toString(rows\_with\_keyword), "\n")

for (row in rows\_with\_keyword) {

print(paste("Row", row, ": ", Bex$Remarks[row]))

}

cat("Total number of occurrences of the keyword '", keyword, "': ", length(rows\_with\_keyword), "\n")

} else {

cat("No occurrences of the keyword '", keyword, "' found in the Remarks column.\n")

}

View(Bex)

```

1.Row \*\*228\*\*: Put "No;Piep" in \*\*GotCorn\*\*

2.Row \*\*158\*\*: Put "Female aggress male;Male aggress male" in \*\*DyadResponse\*\*

3.Row \*\*158\*\*: Put "No;Oort" in \*\*GotCorn\*\* and \*\*SF;Sey\*\* in \*\*Context\*\*

4.Row \*\*225\*\*: Put "No;Xian" in \*\*GotCorn\*\*

5.Row \*\*425\*\*: Put "No;Xian" in \*\*GotCorn\*\*

6.Row \*\*483\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;1" in \*\*GotCorn\*\*

7.Row \*\*491\*\*: Put "SF;Kom" in \*\*SpecialBehaviour\*\* and "No;Oort" in \*\*GotCorn\*\*

8.Row \*\*517\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

9.Row \*\*531\*\*: Put "No;Piep" in \*\*GotCorn\*\*

10.Row \*\*541\*\*: Put "SF;Sey" in \*\*SpecialBehaviour\*\* and "No;Sirk" in \*\*GotCorn\*\*

11.Row \*\*770\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

12.Row \*\*794\*\*: Put "SF;Buk" in \*\*SpecialBehaviour\*\* and "No;Ndaw" in \*\*GotCorn\*\*

13.Row \*\*795\*\*: Put "SF;Buk" in \*\*SpecialBehaviour\*\* and "No;Ndaw" in \*\*GotCorn\*\*

14.Row \*\*811\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

15.Row \*\*812\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

16.Row \*\*813\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

17.Row \*\*899\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom;1" in \*\*GotCorn\*\*

18.Row \*\*910\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

19.Row \*\*916\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

20.Row \*\*917\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;1" in \*\*GotCorn\*\*

21.Row \*\*918\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

22.Row \*\*927\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom" in \*\*GotCorn\*\*

23.Row \*\*963\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;1" in \*\*GotCorn\*\*

24.Row \*\*965\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;1" in \*\*GotCorn\*\*

25.Row \*\*967\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

26.Row \*\*968\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

27.Row \*\*969\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;1" in \*\*GotCorn\*\*

28.Row \*\*971\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

29.Row \*\*977\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom;1" in \*\*GotCorn\*\*

``` {r Remarks - ate 1-29, echo=FALSE}

```

30.Row \*\*978\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom;2" in \*\*GotCorn\*\*

31.Row \*\*1010\*\*: Put "SF;Piep" in \*\*SpecialBehaviour\*\* and "No;Xia" in \*\*GotCorn\*\*

32.Row \*\*1013\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

33.Row \*\*1038\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom" in \*\*GotCorn\*\*

34.Row \*\*1039\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom" in \*\*GotCorn\*\*

35.Row \*\*1040\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom" in \*\*GotCorn\*\*

36.Row \*\*1041\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom" in \*\*GotCorn\*\*

37.Row \*\*1044\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom;1" in \*\*GotCorn\*\*

38.Row \*\*1057\*\*: Put "Yes;CornFell" in \*\*GotCorn\*\*

39.Row \*\*1072\*\*: Put "EatSameBox" in \*\*SpecialBehaviour\*\*

40.Row \*\*1073\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

41.Row \*\*1079\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

42.Row \*\*1080\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom" in \*\*GotCorn\*\*

43.Row \*\*1079\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom" in \*\*GotCorn\*\*

44.Row \*\*1080\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom" in \*\*GotCorn\*\*

45.Row \*\*1087\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom" in \*\*GotCorn\*\*

46.Row \*\*1116\*\*: Put "SF;Pom" in \*\*SpecialBehaviour\*\* and "No;Xian" in \*\*GotCorn\*\*

47.Row \*\*1120\*\*: Put "SF;Pom" in \*\*SpecialBehaviour\*\* and "No;Xian" in \*\*GotCorn\*\*

48.Row \*\*1134\*\*: Put "No;Buk" in \*\*GotCorn\*\*

49.Row \*\*1204\*\*: Put "No;Piep" in \*\*GotCorn\*\*

50.Row \*\*1207\*\*: Put "No;Piep" in \*\*GotCorn\*\*

51.Row \*\*1245\*\*: Put "No;Piep" in \*\*GotCorn\*\*

52.Row \*\*1265\*\*: Put "SF;Buk" in \*\*SpecialBehaviour\*\* and "No;Ndaw;1" in \*\*GotCorn\*\*

53.Row \*\*1289\*\*: Put "No;Buk" in \*\*GotCorn\*\*

54.Row \*\*1335\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

55.Row \*\*1337\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

56.Row \*\*1339\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

57.Row \*\*1343\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

58.Row \*\*1350\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;1" in \*\*GotCorn\*\*

59.Row \*\*1352\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;2" in \*\*GotCorn\*\*

60.Row \*\*1353\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;2" in \*\*GotCorn\*\*

61.Row \*\*1354\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;2" in \*\*GotCorn\*\*

62.Row \*\*1438\*\*: Put "SF;Oort" in \*\*SpecialBehaviour\*\* and "No;Kom;1" in \*\*GotCorn\*\*

63.Row \*\*1459\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;1" in \*\*GotCorn\*\*

64.Row \*\*1511\*\*: Put "No;Xian" in \*\*GotCorn\*\*

65.Row \*\*1511\*\*: Put "Tolerance;Intrusion" in \*\*DyadResponse\*\* and "Gree;Gran" in \*\*IntruderID\*\*

66.Row \*\*1511\*\*: Put "Intrusion;Gree;Gran" in \*\*SpecialBehaviour\*\*

67.Row \*\*1514\*\*: Put "SF;Pom" in \*\*SpecialBehaviour\*\* and "No;Xian" in \*\*GotCorn\*\*

68.Row \*\*1525\*\*: Put "Tolerance;Intrusion" in \*\*DyadResponse\*\* and "SF;Piep" in \*\*Context\*\* and "No;Kom;1" in \*\*GotCorn\*\*

69.Row \*\*1536\*\*: Put "AP;Sey;RT;Sirk" in \*\*SpecialBehaviour\*\*

70.Row \*\*1537\*\*: Put "SF;Sey" in \*\*SpecialBehaviour\*\* and "No;Sirk" in \*\*GotCorn\*\*

71.Row \*\*1550\*\*: Put "No;Both" in \*\*GotCorn\*\*

72.Row \*\*1551\*\*: Put "SF;Sey" in \*\*SpecialBehaviour\*\* and "No;Sirk" in \*\*GotCorn\*\*

73.Row \*\*1569\*\*: Put "No;Sho" in \*\*GotCorn\*\*

74.Row \*\*1617\*\*: Put "SF;Both" in \*\*SpecialBehaviour\*\*

75.Row \*\*1639\*\*: Put "SF;Both" in \*\*SpecialBehaviour\*\*

76.Row \*\*1640\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;2" in \*\*GotCorn\*\*

77.Row \*\*1642\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;2" in \*\*GotCorn\*\*

78.Row \*\*1741\*\*: Put "No;Ouli" in \*\*GotCorn\*\*

79.Row \*\*1778\*\*: Put "No;Pom" in \*\*GotCorn\*\*

80.Row \*\*1885\*\*: Delete row

81.Row \*\*1894\*\*: Put "No;Ndaw" in \*\*GotCorn\*\* and "Ghid" in \*\*IntruderID\*\*

82.Row \*\*2031\*\*: Put "No;Piep" in \*\*GotCorn\*\*

83.Row \*\*2035\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

84.Row \*\*2052\*\*: Put "SF;Sey" in \*\*SpecialBehaviour\*\* and "No;Sirk" in \*\*GotCorn\*\*

85.Row \*\*2089\*\*: Put "No;Piep" in \*\*GotCorn\*\*

86.Row \*\*2090\*\*: Put "No;Piep" in \*\*GotCorn\*\*

87.Row \*\*2123\*\*: Put "Oupa" in \*\*IntruderID\*\* and "No;Both" in \*\*GotCorn\*\*

88.Row \*\*2135\*\*: Put "No;Sho" in \*\*GotCorn\*\*

89.Row \*\*2244\*\*: Put "Scared;Oerw" in \*\*SpecialBehaviour\*\* and "No;Oerw" in \*\*GotCorn\*\*

90.Row \*\*2245\*\*: Put "Oerw" in \*\*IDIdnvidual1\*\*

91.Row \*\*2253\*\*: Put "AP;Sey;RT;Sirk" in \*\*SpecialBehaviour\*\* and "No;Sirk" in \*\*GotCorn\*\*

92.Row \*\*2254\*\*: Put "Sirk" in \*\*IDIndividual1\*\*

93.Row \*\*2313\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;1" in \*\*GotCorn\*\*

94.Row \*\*2316\*\*: Put "Pix" in \*\*IntruderID\*\*

95.Row \*\*2364\*\*: Put "No;Sho" in \*\*GotCorn\*\*

96.Row \*\*2382\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

97.Row \*\*2386\*\*: Put "No;Piep" in \*\*GotCorn\*\*

98.Row \*\*2436\*\*: Put "No;Piep" in \*\*GotCorn\*\*

99.Row \*\*2442\*\*: Put "FL;Piep"

100. Row \*\*2466\*\*: Put "No;Ginq" in \*\*GotCorn\*\*

101. Row \*\*2479\*\*: Put "SF;Piep" in \*\*SpecialBehaviour\*\* and "No;Xia;1" in \*\*GotCorn\*\*

102. Row \*\*2484\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

103. Row \*\*2490\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep" in \*\*GotCorn\*\*

104. Row \*\*2515\*\*: Put "SF;Sey" in \*\*SpecialBehaviour\*\* and "No;Sirk" in \*\*GotCorn\*\*

105. Row \*\*2548\*\*: Put "FL;Oerw" in \*\*SpecialBehaviour\*\*

106. Row \*\*2549\*\*: Put "SF;Sey" in \*\*SpecialBehaviour\*\* and "No;Sirk" in \*\*GotCorn\*\*

107. Row \*\*2559\*\*: Put "SF;Sirk" in \*\*SpecialBehaviour\*\* and "No;Sey" in \*\*GotCorn\*\*

108. Row \*\*2601\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;1" in \*\*GotCorn\*\* and "SFTolerance;Piep" in \*\*Context\*\*

109. Row \*\*2609\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and "No;Piep;2" in \*\*GotCorn\*\* and "SFTolerance;Piep" in \*\*Context\*\*

110. Row \*\*2621\*\*: Put "Oup" in \*\*IntruderID\*\*

111. Row \*\*2670\*\*: Put "No;Piep" in \*\*GotCorn\*\*

112. Row \*\*2675\*\*: Put "SF;Piep" in \*\*SpecialBehaviour\*\* and \*\*No;Xia;1\*\* in \*\*GotCorn\*\*

113. Row \*\*2738\*\*: Put "SF;Xia" in \*\*SpecialBehaviour\*\* and \*\*No;Piep\*\* in \*\*GotCorn\*\*

114. Row \*\*2741\*\*: Put "No;Piep" in \*\*GotCorn\*\*

115. Row \*\*2748\*\*: Put "CheckBox;Both" in \*\*SpecialBehaviour\*\*

116. Make sure the code is safe for multiple run especially for the deleted rows

117. Change the remarks into "Treated" for the following rows: \*\*28, 158, 225, 425, 483, 491, 517, 531, 541, 635, 770, 794, 795, 811, 812, 813, 899, 910, 916, 917, 918, 927, 963, 965, 967, 968, 969, 971, 977, 978, 1010, 1013, 1033, 1038, 1039, 1040, 1041, 1044, 1057, 1072, 1073, 1079, 1080, 1087, 1116, 1120, 1134, 1204, 1207, 1245, 1265, 1289, 1335, 1337, 1339, 1343, 1350, 1352, 1353, 1354, 1357, 1438, 1459, 1511, 1514, 1525, 1536, 1537, 1550, 1551, 1569, 1617, 1639, 1640, 1642, 1741, 1777, 1778, 1885, 1894, 2031, 2035, 2052, 2089, 2090, 2123, 2135, 2244, 2245, 2253, 2254, 2313, 2316, 2341, 2346, 2364, 2382, 2386, 2436, 2442, 2466, 2471, 2479, 2484, 2490, 2515, 2548, 2549, 2559, 2601, 2609, 2621, 2626, 2670, 2675, 2722, 2738, 2741, 2748\*\*

118. Display the lines where changes were made for manual check

```{r Remarks - ate cleaning, echo=FALSE}

```

corn 146

after 84

approach 74

stole 69

left 68

ate 28

audience 44

open 45

intrude 27

numerical\_value\_m 68

trial 8

steal 8

work 2

scare 2

foraging 0, 1402

alarm 0

$approach

[1] 49 88 89 159 327 350 522 789 794 804 851 869 873 894 924 962 988 1024 1082 1137 1260 1262 1270 1382 1406 1408 1410 1432 1471 1473 1522 1523 1526 1527

[35] 1577 1585 1619 1635 1636 1643 1700 1703 1756 1796 1880 1884 1901 1908 1910 1958 1990 2102 2141 2147 2148 2150 2178 2179 2205 2219 2237 2267 2284 2334 2383 2385 2446 2472

[69] 2600 2690 2695 2717 2726 2764

$stole

[1] 138 139 158 427 493 519 543 613 637 796 797 800 869 903 914 921 926 931 967 969 970 973 975 981 982 1012 1014 1017 1042 1043 1044 1045 1048 1083

[35] 1084 1091 1118 1120 1220 1232 1234 1269 1339 1341 1343 1347 1354 1356 1357 1358 1442 1518 1555 1595 1623 1645 1646 1648 1701 1703 1900 2042 2389 2467 2486 2491 2497 2608

[69] 2616

$corn

[1] 12 28 158 225 427 485 493 519 533 543 613 618 637 772 796 797 800 815 816 817 869 903 914 920 921 922 926 931 967 969 971 972 973 975

[35] 981 982 1011 1012 1014 1017 1037 1042 1043 1044 1045 1048 1061 1076 1077 1083 1084 1091 1113 1118 1120 1124 1138 1176 1208 1211 1249 1269 1271 1293 1338 1339 1341 1343

[69] 1347 1354 1356 1357 1358 1361 1432 1442 1463 1515 1518 1522 1529 1540 1541 1554 1555 1573 1595 1623 1645 1646 1648 1701 1703 1747 1756 1783 1784 1796 1891 1900 2038 2039

[103] 2041 2042 2059 2096 2097 2130 2142 2251 2252 2260 2261 2271 2320 2323 2348 2353 2371 2385 2389 2393 2398 2443 2449 2473 2478 2486 2491 2497 2522 2555 2556 2566 2592 2608

[137] 2616 2628 2633 2677 2682 2688 2729 2745 2748 2755

$ate

[1] 12 70 406 920 922 1061 1113 1293 1361 1380 1454 1463 1477 1479 1529 1541 1595 1816 1967 2038 2039 2251 2353 2438 2478 2493 2633 2745

$numerical\_value\_m

[1] 32 33 34 35 36 37 38 39 40 89 389 392 1090 1178 2040

$code\_3\_letters

[1] 3 4 7 12 28 49 52 70 88 89 98 142 158 191 225 247 280 327 350 374 379 380 381 386 387 406 419 427 466 485 488 490 493 519

[35] 521 522 533 543 600 613 618 660 768 770 771 772 774 783 789 794 796 797 798 800 804 815 816 817 851 860 869 873 886 894 903 914 916 920

[69] 921 922 923 926 928 933 935 936 938 943 945 946 947 956 962 967 969 970 971 972 973 975 977 978 981 982 991 992 995 1009 1011 1012 1014 1017

[103] 1037 1044 1045 1048 1061 1069 1071 1073 1076 1077 1078 1080 1082 1083 1084 1090 1091 1113 1114 1118 1120 1127 1137 1138 1176 1180 1194 1208 1211 1220 1232 1234 1239 1240

[137] 1244 1246 1249 1257 1258 1259 1260 1262 1268 1269 1270 1271 1273 1274 1275 1277 1290 1293 1318 1330 1331 1338 1339 1341 1343 1347 1354 1356 1357 1358 1361 1370 1376 1378

[171] 1380 1382 1393 1396 1406 1407 1408 1410 1411 1420 1426 1427 1432 1442 1443 1452 1453 1454 1458 1463 1466 1471 1472 1473 1477 1479 1481 1486 1487 1492 1499 1501 1503 1504

[205] 1515 1522 1523 1526 1527 1529 1533 1540 1541 1545 1547 1550 1553 1554 1555 1560 1561 1563 1568 1573 1575 1577 1579 1580 1581 1585 1587 1595 1619 1623 1624 1633 1635 1636

[239] 1637 1639 1643 1645 1646 1648 1651 1668 1670 1676 1681 1683 1703 1705 1710 1713 1721 1747 1756 1775 1783 1784 1785 1788 1792 1794 1795 1796 1802 1803 1807 1808 1815 1816

[273] 1828 1837 1851 1858 1859 1860 1861 1866 1867 1870 1872 1874 1877 1880 1884 1891 1892 1894 1899 1901 1902 1903 1904 1905 1906 1908 1910 1914 1915 1919 1937 1958 1962 1972

[307] 1985 1990 1992 1995 2023 2035 2038 2039 2040 2041 2042 2054 2059 2060 2063 2067 2068 2096 2097 2099 2102 2105 2108 2109 2123 2128 2130 2136 2138 2141 2142 2146 2147 2148

[341] 2149 2150 2151 2163 2167 2178 2179 2193 2194 2195 2202 2205 2206 2209 2219 2221 2237 2251 2252 2256 2259 2260 2261 2262 2267 2271 2273 2284 2291 2313 2320 2323 2324 2334

[375] 2344 2348 2349 2352 2353 2366 2371 2373 2377 2383 2385 2389 2393 2398 2418 2428 2430 2434 2438 2443 2446 2449 2465 2467 2472 2473 2478 2481 2482 2483 2486 2491 2492 2493

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$sec

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$before

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$after

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[35] 1427 1432 1522 1540 1545 1547 1575 1577 1587 1595 1624 1692 1700 1706 1807 1815 1827 1866 1870 1874 1877 1882 1990 2060 2063 2067 2099 2128 2141 2149 2163 2167 2179 2217

[69] 2252 2261 2349 2398 2434 2472 2478 2483 2499 2549 2555 2579 2726 2729 2746 2773

$left

[1] 789 794 804 873 933 988 1024 1137 1262 1293 1382 1393 1420 1427 1432 1545 1547 1563 1575 1577 1587 1624 1636 1651 1785 1794 1795 1807 1816 1828 1867 1891 1906 1985

[35] 1990 2035 2041 2060 2063 2067 2128 2150 2151 2179 2217 2218 2224 2252 2261 2262 2267 2334 2366 2385 2431 2449 2473 2481 2482 2529 2530 2548 2549 2579 2676 2717 2726 2746

[69] 2773

\* I will now create a variable called \*\*NoRemarks\*\* that will put 1 where there is a remark and 0 where there is nothing

```{r Creation of NoRemarks, echo=FALSE}

# Check if the 'NoRemarks' column already exists

if (!"NoRemarks" %in% names(Bex)) {

# Creation of a New dichotomous variable "No Remarks"

Bex$NoRemarks <- ifelse(Bex$Remarks == "No Remarks", 1, 0)

# Count the number of 1's (No Remarks) and 0's (Remarks) in the "NoRemarks" column

no\_remarks\_1\_count <- sum(Bex$NoRemarks == 1)

no\_remarks\_0\_count <- sum(Bex$NoRemarks == 0)

cat("Number of 'No Remarks' (1's) in the 'NoRemarks' column:", no\_remarks\_1\_count, "\n")

cat("Number of 'Remarks' (0's) in the 'NoRemarks' column:", no\_remarks\_0\_count, "\n")

} else {

cat("The 'NoRemarks' column already exists. No changes made.\n")

}

```