

# **SURVEYMAN:** **Programming and** **Debugging Surveys**

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# Surveys are Ubiquitous

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## Sample Customer Satisfaction Survey

For each of the following statements about Elliance, Inc., please indicate whether you:  
Strongly Agree (1); Somewhat Agree (2); Neither Agree nor Disagree (3); Somewhat  
Disagree (4); Strongly Disagree (5).

### 1: Experience and Expertise

	1 Strongly Agree	2 Somewhat Agree	3 Neither Agree Nor Disagree	4 Somewhat Disagree	5 Strongly Disagree
You are helpful in diagnosing the causes of our problem areas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You document your work activities well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You don't wait for me to initiate everything; you anticipate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You stay current with new developments and technology in your industry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You have a good understanding of our business.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 2: Communications

	1 Strongly Agree	2 Somewhat Agree	3 Neither Agree Nor Disagree	4 Somewhat Disagree	5 Strongly Disagree
Your communications are clear and jargon-free.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Industry

# Surveys are Ubiquitous

## Sample Customer Satisfaction Survey

For each of the following statements about Elliance, Inc., please indicate whether you: Strongly Agree (1); Somewhat Agree (2); Neither Agree nor Disagree (3); Somewhat Disagree (4); Strongly Disagree (5).

### 1: Experience and Expertise

1 Strongly Agree	2 Somewhat Agree	3 Neither Agree Nor Disagree	4 Somewhat Disagree	5 Strongly Disagree
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You are helpful in diagnosing the causes of our problem areas.

You document your work activities well.

You don't wait for me to initiate everything; you anticipate.

You stay current with new developments and technology in your industry.

You have a good understanding of our business.

### 2: Communications

1 Strongly Agree	2 Somewhat Agree	3 Neither Agree Nor Disagree	4 Somewhat Disagree	5 Strongly Disagree
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Your communications are free of jargon.

How I Feel About My Life	Strongly Agree	Agree a Little	Neither Agree nor Disagree	Disagree a Little	Strongly Disagree	No Answer
I like to get together with friends as much as possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have people in my life who really care about what's happening to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If for some reason I were in jail, there are people I could call who would bail me out.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I were sick or hurt and I needed someone to take me to the hospital, I would have no trouble finding someone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I were hungry and had no money to buy food, there are people I know who would give me food.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I were in trouble and some people were going to try to hurt me, there are other people I could get protection from.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Psychometrics

## Industry

# Surveys are Ubiquitous

## Sample Customer Satisfaction Survey

For each of the following statements about Elliance, Inc., please indicate whether you: Strongly Agree (1); Somewhat Agree (2); Neither Agree nor Disagree (3); Somewhat Disagree (4); Strongly Disagree (5).

### 1: Experience and Expertise

	1 Strongly Agree	2 Somewhat Agree	3 Neither Agree Nor Disagree	4 Somewhat Disagree	5 Strongly Disagree
You are helpful in diagnosing the causes of our problem areas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You document your work activities well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You don't wait for me to initiate everything; you anticipate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You stay current with new developments and technology in your industry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You have a good understanding of our business.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 2: Communications

	1 Strongly Agree	2 Somewhat Agree	3 Neither Agree Nor Disagree	4 Somewhat Disagree	5 Strongly Disagree
Your communications are free of jargon.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Industry

How I Feel About My Life	Strongly Agree	Agree a Little	Neither Agree nor Disagree	Disagree a Little	Strongly Disagree	No Answer
There are a lot of people I like to hang out with.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I like to get together with friends as much as possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have people in my life who really care about what's happening to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If for some reason I were sent to jail, there are people I could call who would bail me out.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I were sick or hurt and I needed someone to take me to the hospital, I would have no trouble finding someone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I were hungry and had no money to buy food, there are people I know who would give me food.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I were in trouble and some people were going to try to hurt me, there are other people I could get protection from.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Psychometrics

Table 2. Russians Have Generally Positive Views of Stalin

Question asked: How would you assess Stalin's role in the history/life of our country?

Russia	1994**	2003	2006	2008	2009	2010	2011
Generally positive*	27	53	42	42	49	51	45
Generally negative*	47	33	31	33	33	30	35
Don't know	19	14	21	21	18	19	20

# Politics

\* Amalgamated answers: "entirely positive" combined with "mostly positive" and "mostly negative" with "entirely negative."

\*\*The 1994 poll used a different scale; along with the variants shown, the poll also offered the additional prompt "insignificant role," which was chosen by 5 percent of those polled.

# Surveys are Ubiquitous

## Sample Customer Satisfaction Survey

For each of the following statements about Ellian Strongly Agree (1); Somewhat Agree (2); Neither Disagree (4); Strongly Disagree (5).

### 1: Experience and Expertise

	1 Strongly Agree	2 Somewhat Agree
--	---------------------	---------------------

You are helpful in diagnosing the causes of our problem areas.

You document your work activities well.

You don't wait for me to initiate everything; you anticipate.

You stay current with new developments and technology in your industry.

You have a good understanding of our business.

### 2: Communications

	1 Strongly Agree	2 Somewhat Agree
--	---------------------	---------------------

Your communications are free of jargon.

**United States Census Bureau**  
**Census 2010**

This is the official form for all the people at this address. It is quick and easy, and your answers are protected by law.

Use a blue or black pen.  
**Start here**

The Census must count every person living in the United States on April 1, 2010. Before you answer Question 1, count the people living in this house, apartment, or mobile home using our guidelines.

- Count all people, including babies, who live and sleep here most of the time.
- The Census Bureau also conducts counts in institutions and other places, so:
  - Do not count anyone living away either at college or in the Armed Forces.
  - Do not count anyone in a nursing home, jail, prison, detention facility, etc., on April 1, 2010.
  - Leave these people off your form, even if they will return to live here after they leave college, the nursing home, the military, jail, etc. Otherwise, they may be counted twice.

The Census must also include people without a permanent place to stay, so:
 

- If someone who has no permanent place to stay is staying here on April 1, 2010, count that person. Otherwise, he or she may be missed in the census.

1. How many people were living or staying in this house, apartment, or mobile home on April 1, 2010?  
Number of people =

2. Were there any additional people staying here April 1, 2010 that you did not include in Question 1? Mark  all that apply.
 

- Children, such as newborn babies or foster children
- Relatives, such as adult children, cousins, or in-laws
- Nonrelatives, such as roommates or live-in baby sitters
- People staying here temporarily
- No additional people

3. Is this house, apartment, or mobile home — Mark  ONE box.
 

- Owned by you or someone in this household with a mortgage or loan? Include home equity loans.
- Owned by you or someone in this household free and clear (without a mortgage or loan)?
- Rented?
- Occupied without payment of rent?

4. What is your telephone number? You may need to understand an answer.
   
Area Code + Number  -  - 
  
OMB No. 0607-0919-D; Approval Expires 12/31/2011.
   
Form D-61 (2-12-2008)
   
U.S. CENSUS BUREAU

## How I Feel About My Life

	Strongly Agree	Agree a Little	Neither Agree nor Disagree	Disagree a Little	Strongly Disagree	No Answer
5. Please provide information for each person living here. Start with a person living here who owns or rents this house, apartment, or mobile home. If the owner or renter lives somewhere else, start with any adult living here. This will be Person 1. What is Person 1's name? Print name below.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Last Name <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
First Name <input type="text"/> MI <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. What is Person 1's sex? Mark <input checked="" type="checkbox"/> ONE box. <ul style="list-style-type: none"> <li><input type="checkbox"/> Male</li> <li><input type="checkbox"/> Female</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. What is Person 1's age and what is Person 1's date of birth? Please report babies as age 0 when the child is less than 1 year old. Print numbers in boxes. Age on April 1, 2010      Month      Day      Year of birth <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ NOTE: Please answer BOTH Question 8 about Hispanic origin and Question 9 about race. For this census, Hispanic origins are not races.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is Person 1 of Hispanic, Latino, or Spanish origin? <ul style="list-style-type: none"> <li><input type="checkbox"/> No, not of Hispanic, Latino, or Spanish origin</li> <li><input type="checkbox"/> Yes, Mexican, Mexican Am., Chicano</li> <li><input type="checkbox"/> Yes, Puerto Rican</li> <li><input type="checkbox"/> Yes, Cuban</li> <li><input type="checkbox"/> Yes, another Hispanic, Latino, or Spanish origin — Print origin, for example, Argentine, Colombian, Dominican, Nicaraguan, Salvadoran, Spanish, and so on. <input type="text"/></li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. What is Person 1's race? Mark <input checked="" type="checkbox"/> one or more boxes. <ul style="list-style-type: none"> <li><input type="checkbox"/> White</li> <li><input type="checkbox"/> Black, African Am., or Negro</li> <li><input type="checkbox"/> American Indian or Alaska Native — Print name and/or tribe. <input type="text"/></li> <li><input type="checkbox"/> Asian Indian <input type="checkbox"/> Japanese <input type="checkbox"/> Native Hawaiian</li> <li><input type="checkbox"/> Chinese <input type="checkbox"/> Korean <input type="checkbox"/> Guamanian or Chamorro</li> <li><input type="checkbox"/> Filipino <input type="checkbox"/> Vietnamese <input type="checkbox"/> Samoan</li> <li><input type="checkbox"/> Other Asian — Print race for example, Hmong, Lao, Thai, Pakistani, Cambodian, and so on. <input type="text"/></li> <li><input type="checkbox"/> Other Pacific Islander — Print race, for example, Fijian, Tongan, and so on. <input type="text"/></li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Does Person 1 sometimes live or stay somewhere else? <ul style="list-style-type: none"> <li><input type="checkbox"/> No</li> <li><input checked="" type="checkbox"/> Yes — Mark <input checked="" type="checkbox"/> all that apply.         <ul style="list-style-type: none"> <li><input type="checkbox"/> In college housing</li> <li><input type="checkbox"/> In the military</li> <li><input type="checkbox"/> At a seasonal or second residence</li> <li><input type="checkbox"/> In a nursing home</li> <li><input type="checkbox"/> For child custody</li> <li><input type="checkbox"/> In jail or prison</li> <li><input type="checkbox"/> For another reason</li> </ul> </li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ If more people were counted in Question 1, continue with Person 2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## chometrics

### Government

## Politics

### Views of Stalin

Is Stalin's role in the history/life of our country?

2006	2008	2009	2010	2011
42	42	49	51	45
31	33	33	30	35
21	21	18	19	20

\* Amalgamated answers: "entirely positive" combined with "mostly positive" and "mostly negative" with "entirely negative."

\*\*The 1994 poll used a different scale; along with the variants shown, the poll also offered the additional prompt "insignificant role," which was chosen by 5 percent of those polled.

Industry

# Typical Workflow

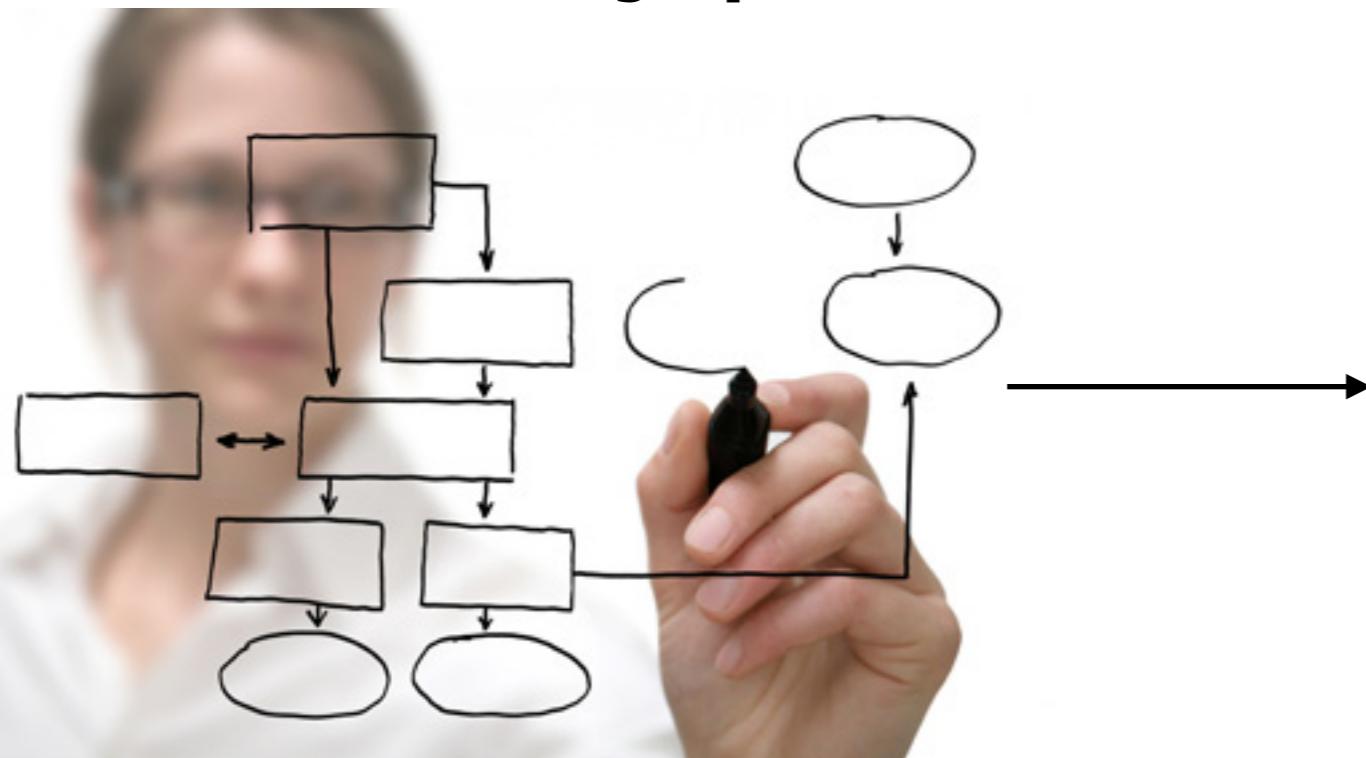
# Typical Workflow



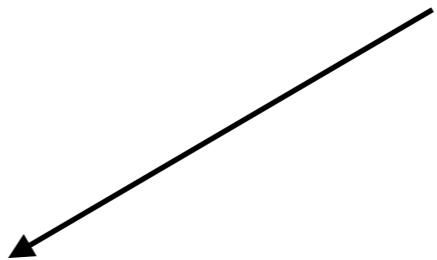
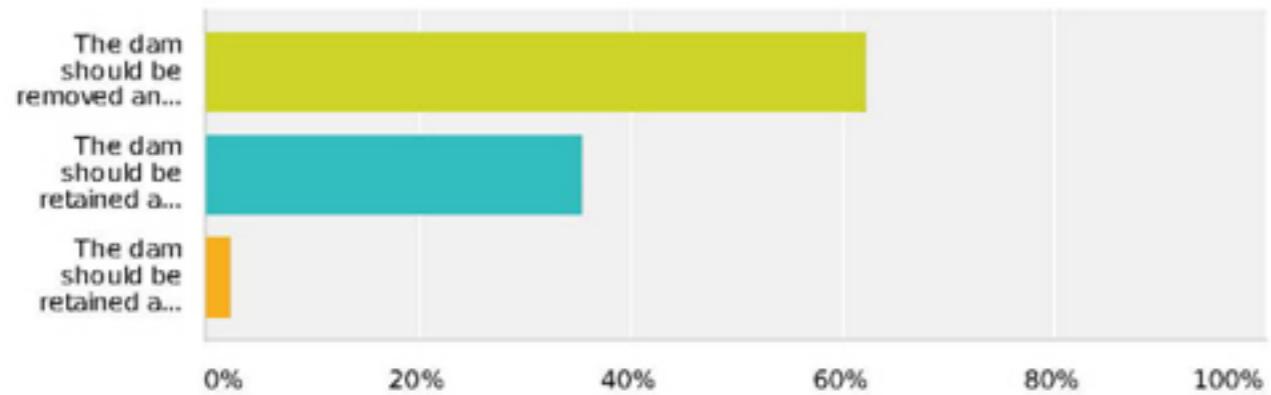
# Typical Workflow



# Typical Workflow



**Q5 What do you think should happen with Mirror Pond?**

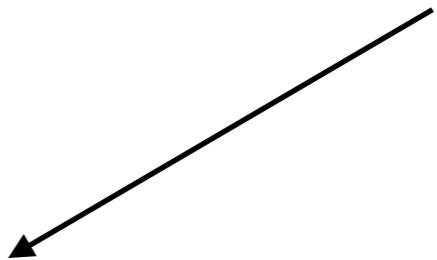
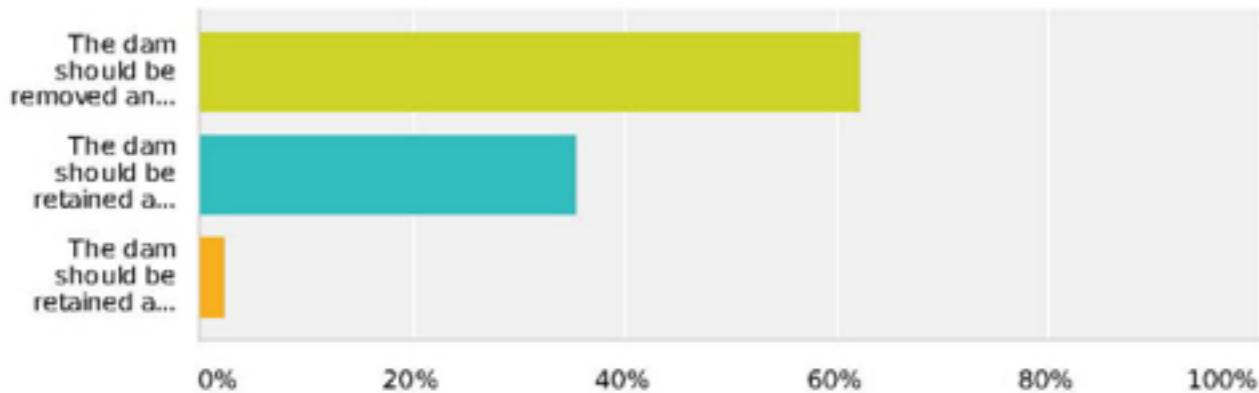


# Typical Workflow

Write  
your  
Program



Q5 What do you think should  
happen with Mirror Pond?



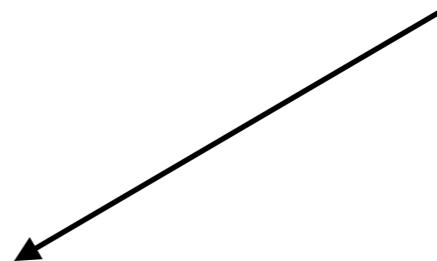
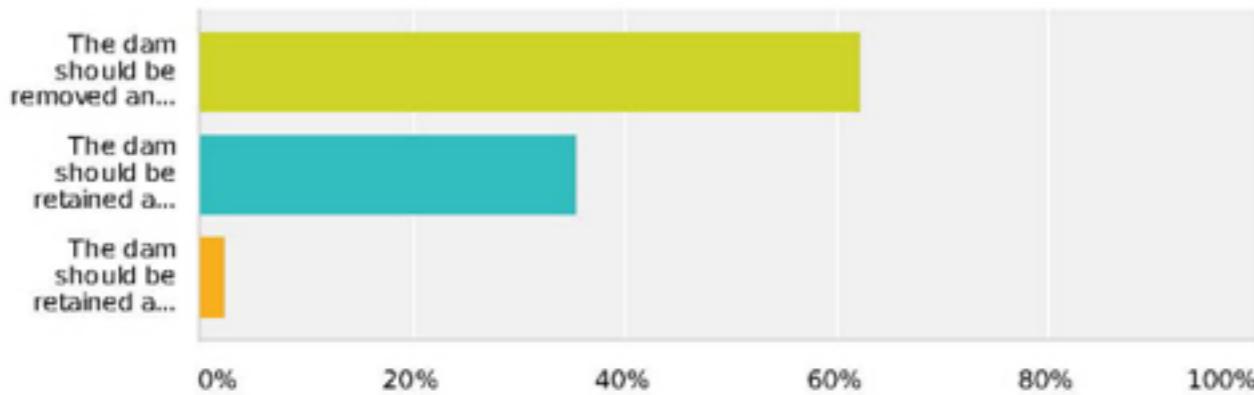
# Typical Workflow

**Write  
your  
Program**

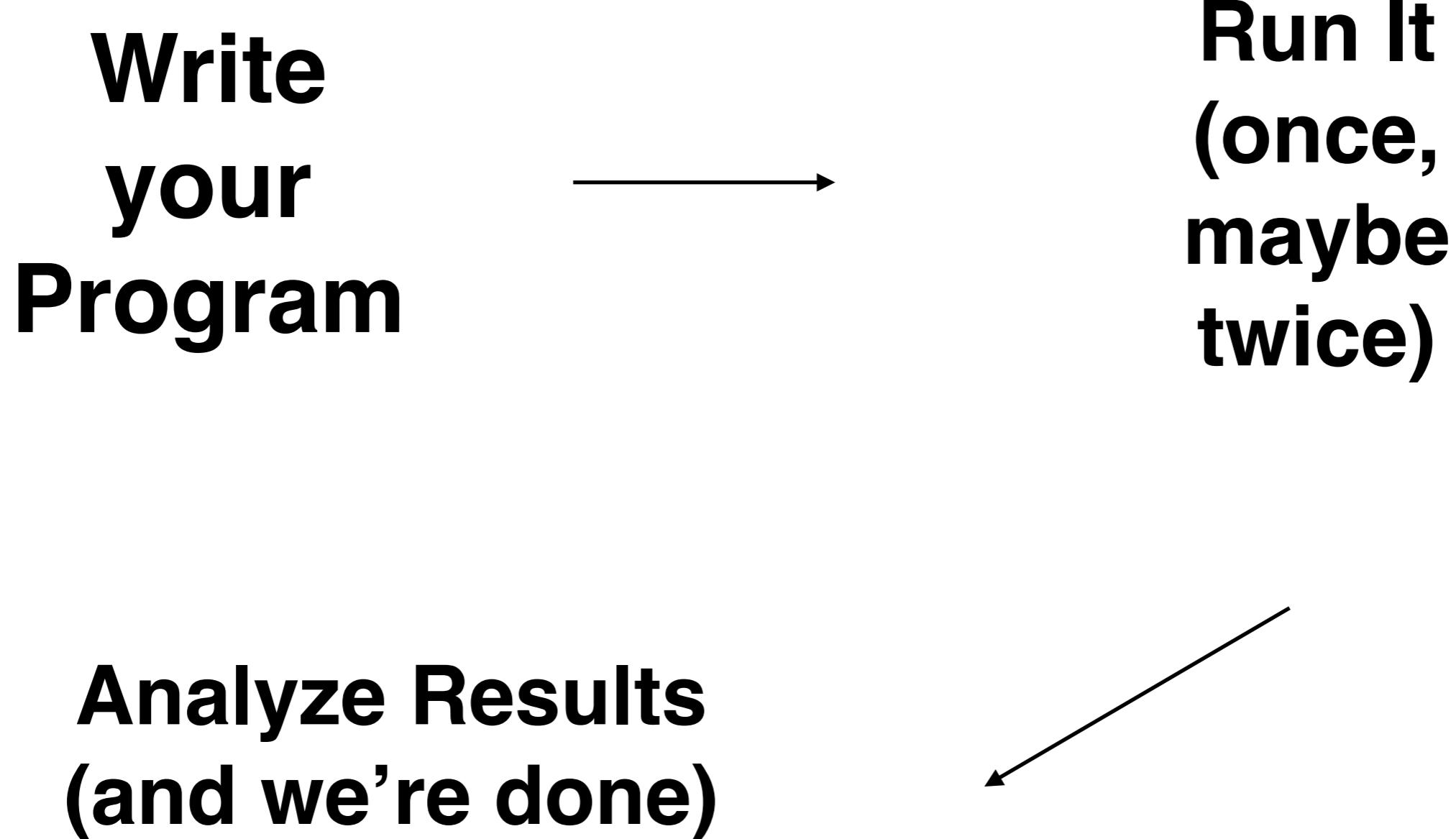


**Run It  
(once,  
maybe  
twice)**

**Q5 What do you think should  
happen with Mirror Pond?**



# Typical Workflow



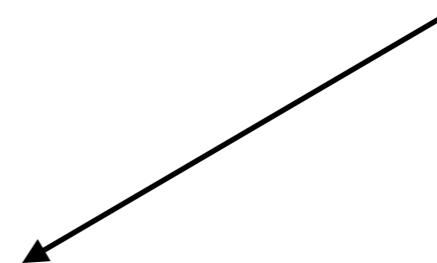
# Typical Workflow

**Write  
your  
Program**



**Run It  
(once,  
maybe  
twice)**

**Analyze Results  
(and we're done)**



**anything missing?**

I DON'T ALWAYS TEST MY  
CODE



BUT WHEN I DO I DO IT IN  
PRODUCTION

# I DON'T ALWAYS TEST MY CODE

Random  
Respondents

BUT WHEN I DO I DO IT IN  
PRODUCTION

# I DON'T ALWAYS TEST MY CODE

Random  
Respondents

Wording Bias

BUT WHEN I DO I DO IT IN  
PRODUCTION

# I DON'T ALWAYS TEST MY CODE

Random  
Respondents

Wording Bias

Breakoff

BUT WHEN I DO I DO IT IN  
PRODUCTION

# I DON'T ALWAYS TEST MY CODE

Random  
Respondents

Order Bias

Wording Bias

Breakoff

BUT WHEN I DO I DO IT IN  
PRODUCTION

# I DON'T ALWAYS TEST MY CODE

Random  
Respondents

Order Bias

Wording Bias

Breakoff

Lazy  
Respondents

## BUT WHEN I DO I DO IT IN PRODUCTION

# I DON'T ALWAYS TEST MY CODE

Random Responses

Wording Blanks

Order was

Breakoff

Lazy  
Respondents

## BUT WHEN I DO I DO IT IN PRODUCTION

I DON'T ALWAYS TEST MY  
CODE

Random  
Responses

INVALID

Wording Bias

Breakoff

Lazy  
Respondents

BUT WHEN I DO I DO IT IN  
PRODUCTION



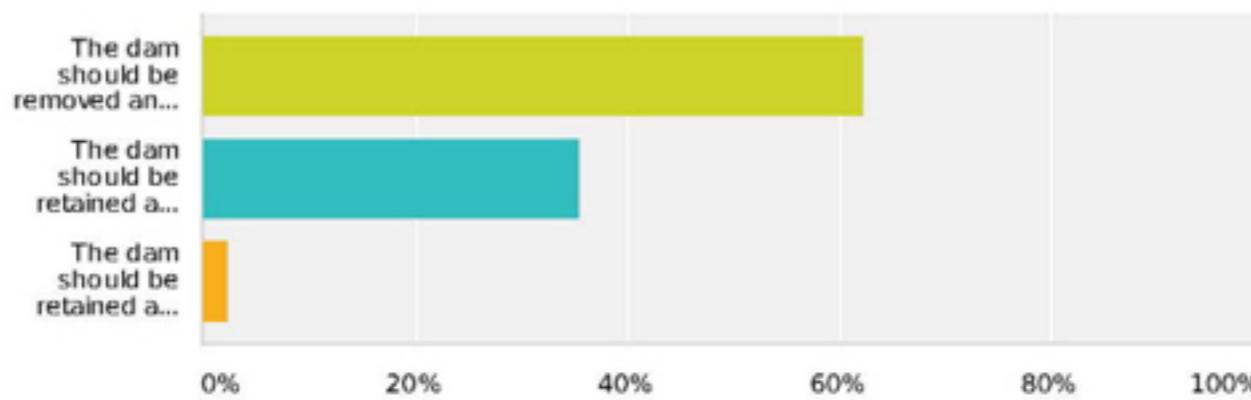
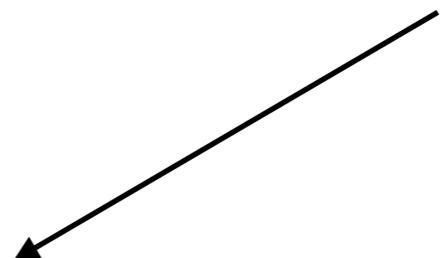
urveyMan

For Programming and Debugging Surveys

# SurveyMan Workflow



**Q5 What do you think should happen with Mirror Pond?**

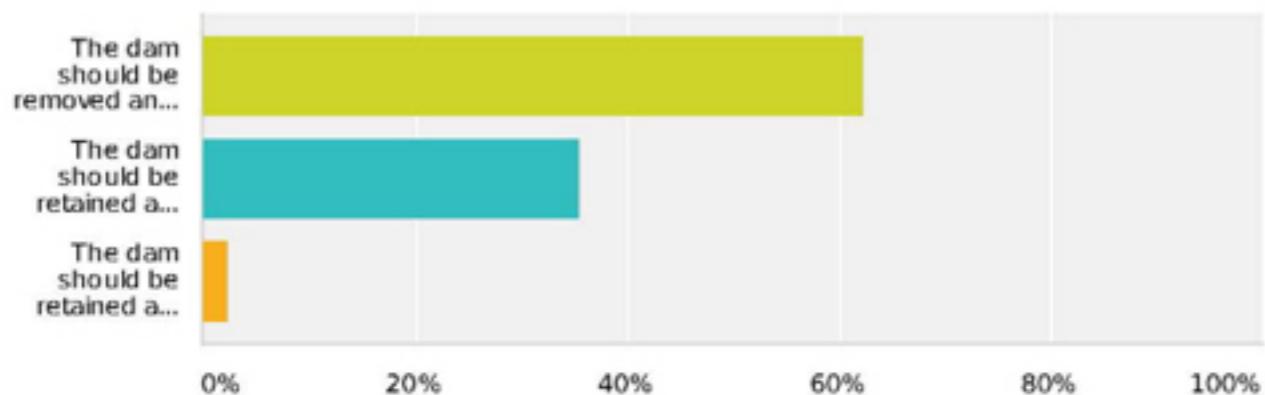


# SurveyMan Workflow

Block: Question	Options	ordered	freeText
1 What is your age?	18-25	yes	
1	26-35	yes	
1	36-45	yes	
1	46-65	yes	
1	66+	yes	
1 Are you a native speaker of English?	Yes	no	
1	No	no	
2 Please say both words aloud. Which one would you say?	definitely corvette-licious	yes	
2	probably corvette-licious	yes	
2	probably corvette-licious	yes	
2	definitely corvette-licious	yes	
2 Please say both words aloud. Which one would you say?	definitely stampede-licious	yes	
2	probably stampede-licious	yes	
2	probably stampede-licious	yes	
2	definitely stampede-licious	yes	
2 Please say both words aloud. Which one would you say?	definitely berlin-licious	yes	
2	probably berlin-licious	yes	
2	probably berlin-licious	yes	
2	definitely berlin-licious	yes	
2 Please say both words aloud. Which one would you say?	definitely typhoon-licious	yes	
2	probably typhoon-licious	yes	
2	probably typhoon-licious	yes	
2	definitely typhoon-licious	yes	



**Q5 What do you think should happen with Mirror Pond?**

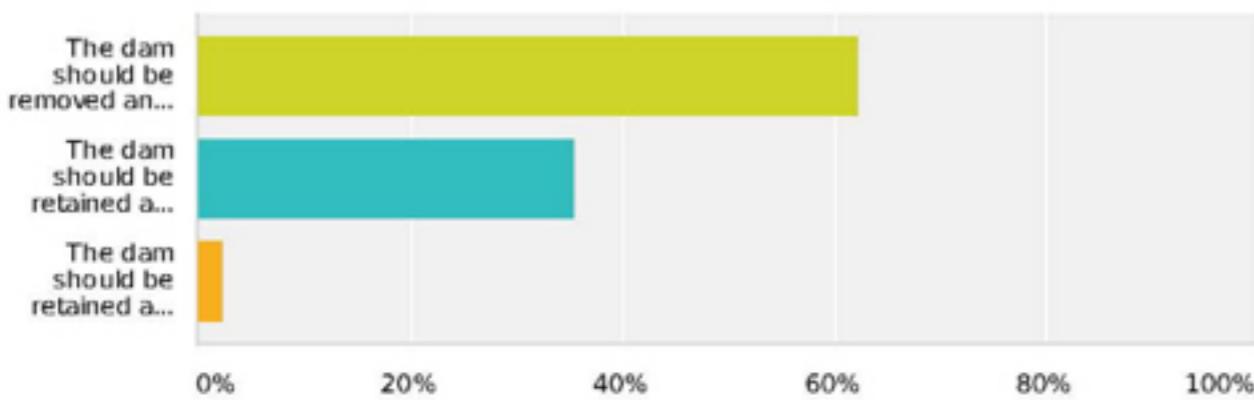


# SurveyMan Workflow

Block	Question	Options	ordered	freeText
1	What is your age?	18-25 26-35 36-45 46-65 66+	yes yes yes yes no	
1	Are you a native speaker of English?	Yes No	no no	
2	Please say both words aloud. Which one would you say?	definitely corvette-licious probably corvette-licious probably corvette-licious definitely corvette-licious definitely stampede-licious probably stampede-licious probably stampede-licious definitely stampede-licious definitely berlin-licious probably berlin-licious probably berlin-licious definitely berlin-licious definitely typhoon-licious probably typhoon-licious probably typhoon-licious definitely typhoon-licious	yes yes yes yes yes yes yes yes yes yes yes yes yes yes yes yes	
2	Please say both words aloud. Which one would you say?			
2	Please say both words aloud. Which one would you say?			
2	Please say both words aloud. Which one would you say?			
2	Please say both words aloud. Which one would you say?			

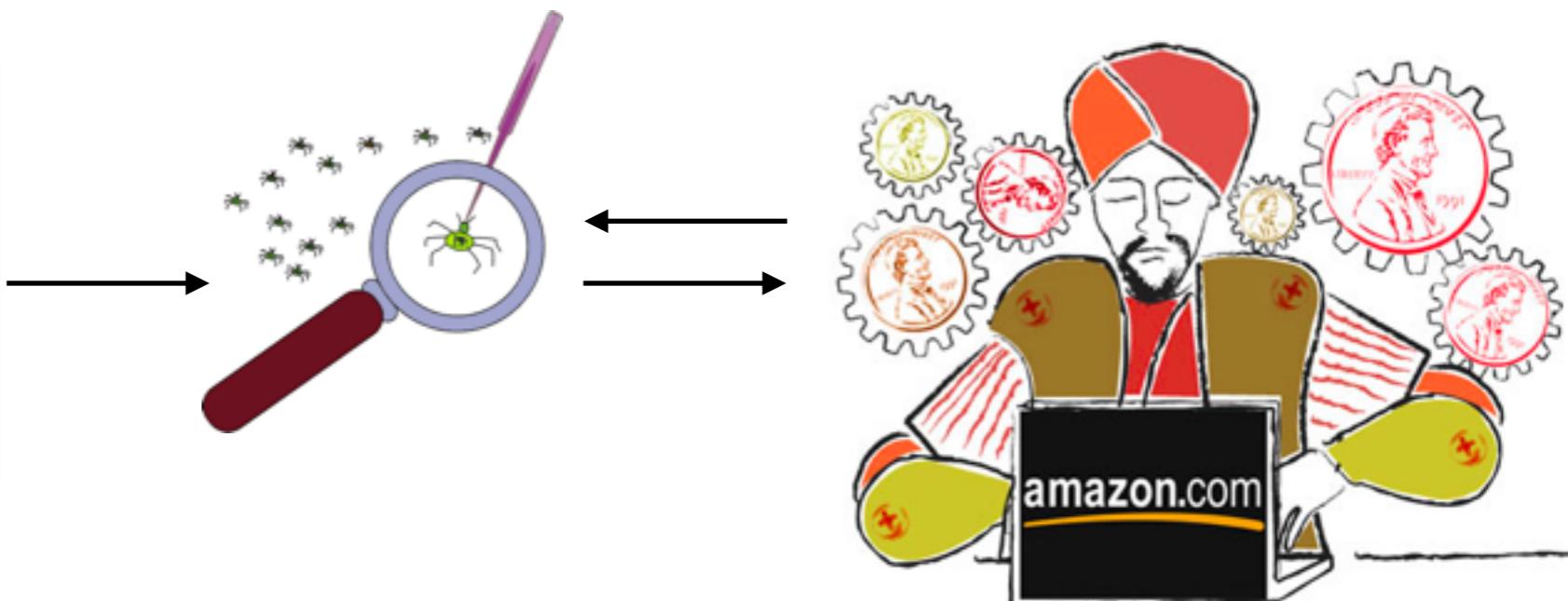


**Q5 What do you think should happen with Mirror Pond?**

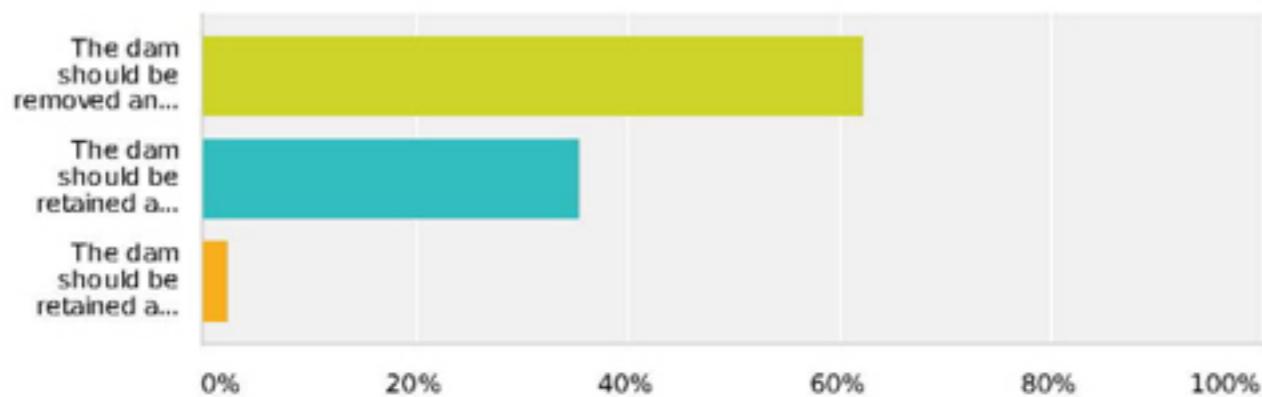


# SurveyMan Workflow

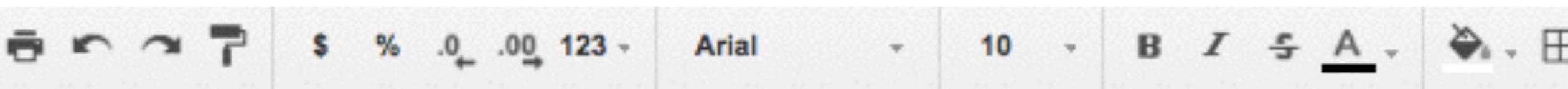
Block: Question	Options	ordered	freeText
1 What is your age?	18-25	yes	
1	26-35	yes	
1	36-45	yes	
1	46-65	yes	
1	66+	yes	
1	Yes	no	
1	No	no	
1 Are you a native speaker of English?	definitely corvette-licious	yes	
1	probably corvette-licious	yes	
1	probably corvette-licious	yes	
1	definitely corvette-licious	yes	
2 Please say both words aloud. Which one would you say?	definitely stampede-licious	yes	
2	probably stampede-licious	yes	
2	probably stampede-licious	yes	
2	definitely stampede-licious	yes	
2 Please say both words aloud. Which one would you say?	definitely berlin-licious	yes	
2	probably berlin-licious	yes	
2	probably berlin-licious	yes	
2	definitely berlin-licious	yes	
2 Please say both words aloud. Which one would you say?	definitely typhoon-licious	yes	
2	probably typhoon-licious	yes	
2	probably typhoon-licious	yes	
2	definitely typhoon-licious	yes	



**Q5 What do you think should happen with Mirror Pond?**



# Language Overview



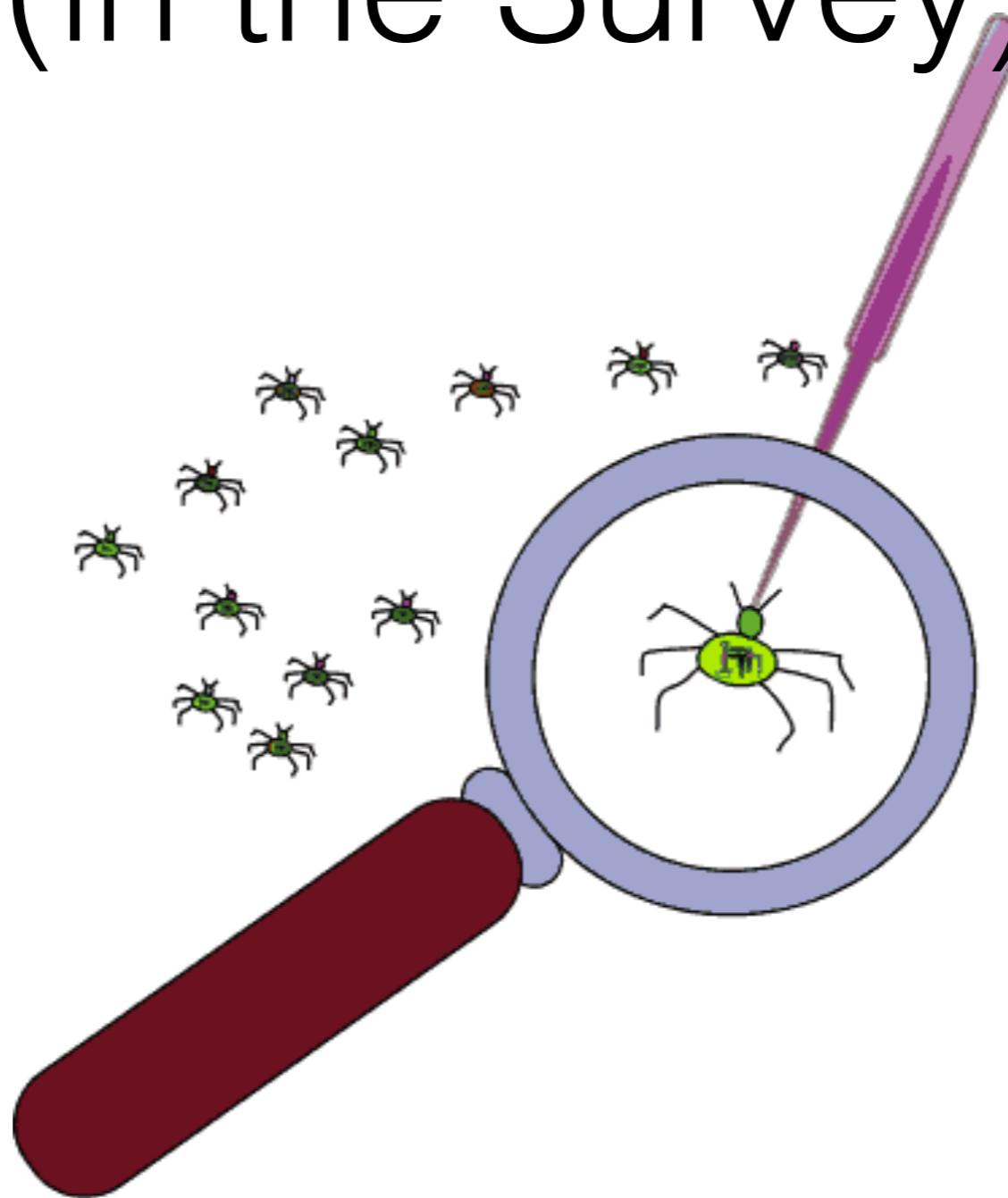
A screenshot of a Microsoft Word document interface. The ribbon at the top includes sections for Home, Insert, Page Layout, References, Mailings, and Review. Below the ribbon is a toolbar with icons for print, undo, redo, cut, copy, paste, and other functions. The main area shows a table with four columns labeled A, B, C, and D. Column A contains questions, column B contains options, column C contains block numbers, and column D contains branch labels.

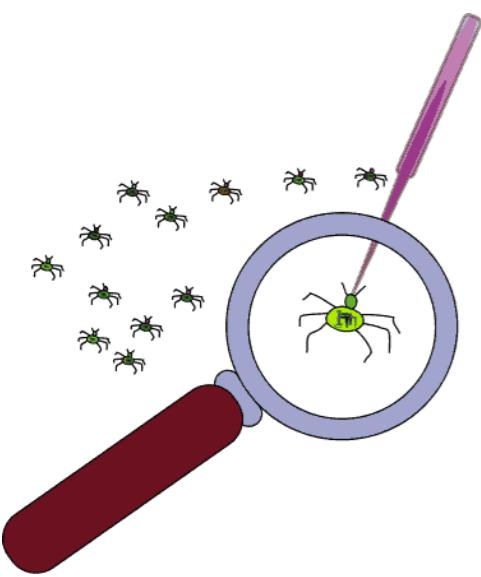
	A	B	C	D
1	QUESTION	OPTIONS	BLOCK	BRANCH
2	How often do you vote?	Always	1	
3		Sometimes		
4		Never		
5	Do you favor or oppose taking military action in Iraq?	Yes	1.a1	NEXT
6		No		
7		Maybe		
8	Do you favor or oppose taking military action in Iraq, even if it meant that U.S. forces might suffer thousands of casualties?	Yes	1.a1	NEXT
9		No		
10		Maybe		

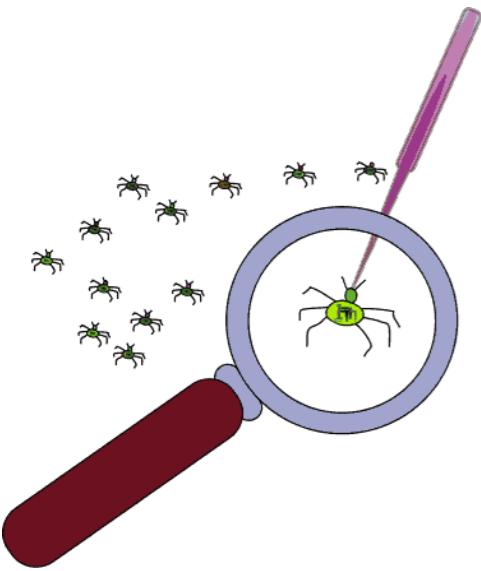
# Language Overview

	A	B	C	D
1	QUESTION	OPTIONS	BLOCK	BRANCH
2	How often do you vote?	Always	1	
3		Sometimes		
4		Never		
5	Do you favor or oppose taking military action in Iraq?	Yes	1.a1	NEXT
6		No		
7		Maybe		
8	Do you favor or oppose taking military action in Iraq, even if it meant that U.S. forces might suffer thousands of casualties?	Yes	1.a1	NEXT
9		No		
10		Maybe		

# “Program” Bugs (in the Survey)







# Question Order Bias

# **(1) Do you favor or oppose allowing gays and lesbians to marry?**

- Favor (33%)
- Oppose (61%)

**(1) Do you favor or oppose  
allowing  
gays and lesbians to marry?**

- Favor (33%)
- Oppose (61%)

**(2) Do you favor or oppose  
allowing gays and lesbians to  
enter into legal agreements that  
give them the same rights as  
married couples?**

- Favor (**45%**)
- Oppose (47%)

**(1) Do you favor or oppose allowing gays and lesbians to marry?**

- Favor (33%)
- Oppose (61%)

**(2) Do you favor or oppose allowing gays and lesbians to enter into legal agreements that give them the same rights as married couples?**

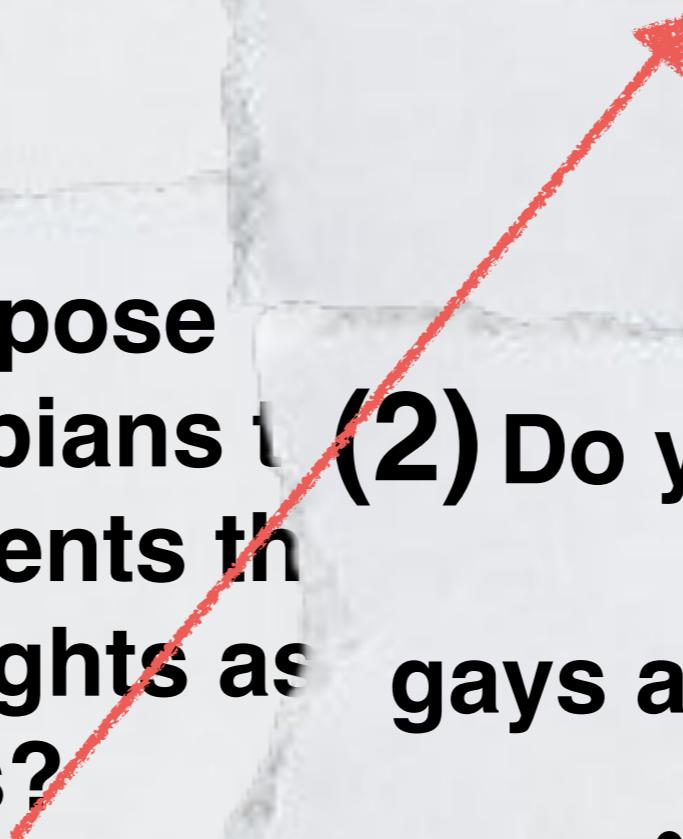
- Favor (**45%**)
- Oppose (47%)

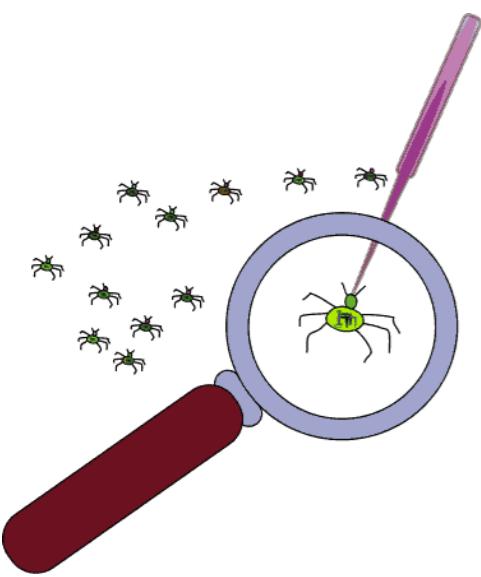
**(1) Do you favor or oppose allowing gays and lesbians enter into legal agreements to give them the same rights as married couples?**

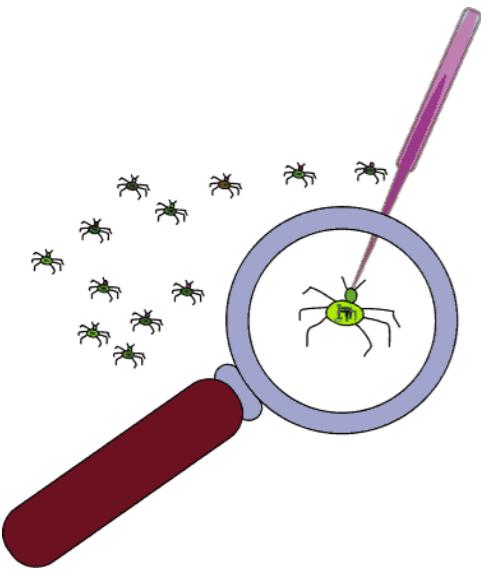
- Favor (**37%**)
- Oppose (55%)

**(2) Do you favor or oppose allowing gays and lesbians to marry?**

- Favor (30%)
- Oppose (58%)







# Wording Bias

**Do you favor or oppose taking  
military action in Iraq to end  
Saddam Hussein's rule?**

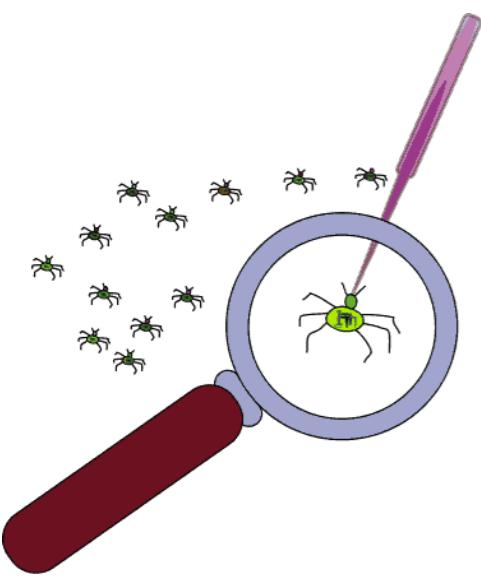
**Do you favor or oppose taking  
military action in Iraq to end  
Saddam Hussein's rule?**

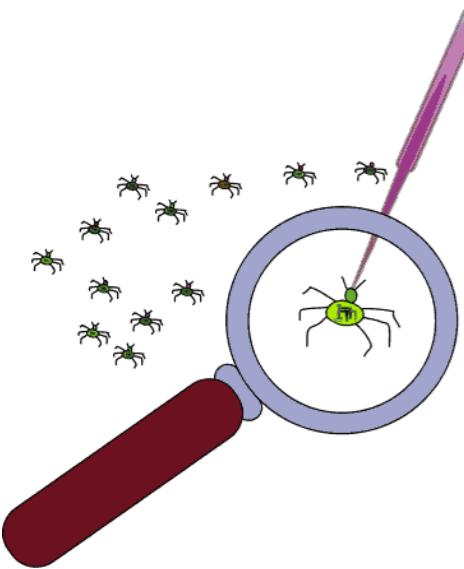
**68% in favor**

**Do you favor or oppose taking  
military action in Iraq to end  
Saddam Hussein's rule  
*even if it meant that U.S. forces  
might suffer thousands of  
casualties?***

**Do you favor or oppose taking  
military action in Iraq to end  
Saddam Hussein's rule  
*even if it meant that U.S. forces  
might suffer thousands of  
casualties?***

**43% in favor**





# Breakoff (Abandonment)

# Offensive/Problematic Questions

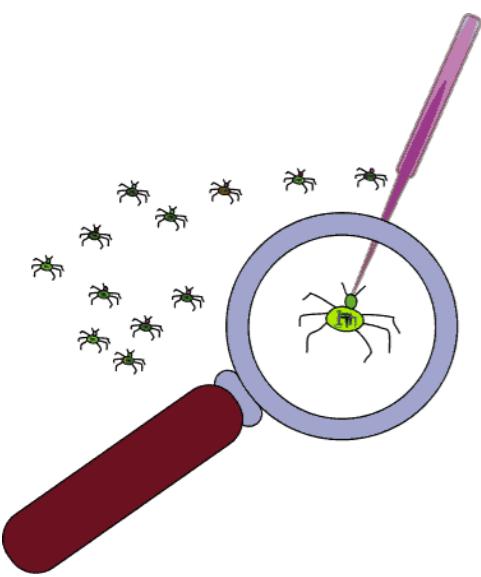
# Offensive/Problematic Questions

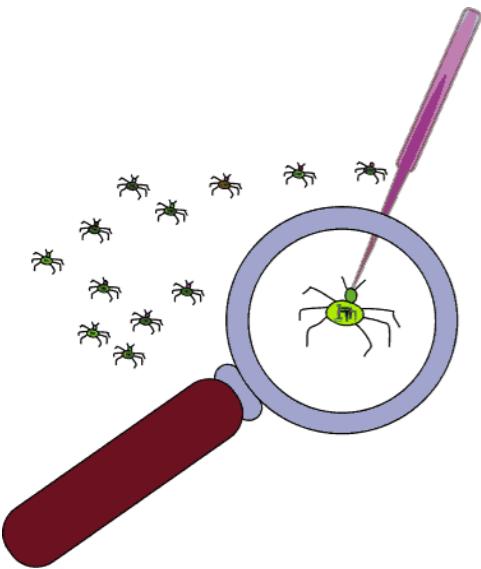
**Survey topic : Political Ideology**

# Offensive/Problematic Questions

**Have you ever been unfaithful to your spouse or partner?**







# Overly Long Surveys (Abandonment)

**Notice** - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m). Public reporting burden for this collection of information is estimated to average 30 minutes per response including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to PHS Reports Clearance Officer, ATTN: PRA (0920-0214); Hubert H. Humphrey Building, Room 737-F, 200 Independence Avenue, SW; Washington, DC 20201.

<b>1. RO</b> <b>9-10</b>	<b>2. Sample Suffix</b> <b>11-13</b>	<b>3. Week</b> <b>14</b>	<b>4. Segment type</b> 1 <input type="checkbox"/> Area 2 <input type="checkbox"/> Permit	FORM <b>HIS-1 (1996)</b> (8-1-95)	
<b>5. Control number</b>			<b>6. Screening status</b> 1 <input type="checkbox"/> S <b>32</b> 2 <input type="checkbox"/> I	U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS ACTING AS COLLECTING AGENT FOR THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE	
<b>PSU</b> <b>17-21</b>	<b>Segment</b> <b>22-25</b>	<b>Suffix</b> <b>26-27</b>	<b>Serial</b> <b>28-29</b>	<b>Check digit</b> <b>30</b>	
<b>RT 11 7a. What is your exact address? (Including House No., Apt. No., or other identification; county and ZIP Code)</b>					<b>4-8</b>
<b>S. T. (Item 4)</b>					<b>LISTING SHEET</b> <b>9-119</b>
<b>City</b>	<b>State</b>	<b>County</b>	<b>ZIP Code</b>	<b>Sheet</b>	
					<b>Line No.</b>
<b>b. Is this your mailing address? (Mark box or specify if different; include county and ZIP Code)</b>					<b>RT 12 4-83</b>
					<input type="checkbox"/> Same as 7a
<b>City</b>	<b>State</b>	<b>County</b>	<b>ZIP Code</b>		
<b>c. GQ name</b>					<b>84-117</b> <b>Sample unit No.</b> <b>Type code</b> <b>118-120</b>
<b>8. YEAR BUILT (Area segments only)</b>					
<input type="checkbox"/> Ask (Except for group quarters, mobile homes, trailers, tents, boats, and other units not in structures.)					
<input type="checkbox"/> Do not ask					
<b>When was this structure originally built?</b>					
<input type="checkbox"/> Before 4-1-90 (Continue interview)					
<input type="checkbox"/> After 4-1-90 (Complete 9c when required; END interview)					
<b>9. COVERAGE QUESTIONS</b>					
<input type="checkbox"/> Ask items that are marked					
<input type="checkbox"/> Do not ask					
<b>a. <input type="checkbox"/> Are there any other living quarters — either occupied or vacant — in this building?</b> <input type="checkbox"/> Yes (Fill Table X) <input type="checkbox"/> No					
<b>b. <input type="checkbox"/> Are there any other living quarters — either occupied or vacant — on this floor?</b> <input type="checkbox"/> Yes (Fill Table X) <input type="checkbox"/> No					
<b>c. <input type="checkbox"/> Is there any other building, mobile home, or trailer — either occupied or vacant — on this property for people to live in?</b> <input type="checkbox"/> Yes (Fill Table X) <input type="checkbox"/> No					
<b>10a. LAND USE</b>					
<input type="checkbox"/> URBAN (11)					
<input type="checkbox"/> RURAL - Reg. units and G.Q. units coded 92-N or 93-N in 7c - Ask item 10b - GO units not coded 92-N or 93-N in 7c - Mark "No" in item 10b without asking					
<b>b. During the past 12 months, did sales of crops, livestock, and other farm products from this place amount to \$1,000 or more?</b>					
<input type="checkbox"/> Yes (11) <input type="checkbox"/> No					

## **NATIONAL HEALTH INTERVIEW SURVEY**

**15. Neighbor screening results (Mark if "S" in item 6)**

- 0  Neighbors not contacted  
1  Screened out by neighbors  
2  Eligible per neighbor  
3  Undetermined by neighbors

**55**
**16. Noninterview reason**
**TYPE A**

- 01  Refused  
02  No one home, repeated calls  
03  Temporarily absent  
04  Language problem  
05  Other (Specify) \_\_\_\_\_

Indicate best estimate of race/ethnicity for each Type A

**56-57****58**

- 1  Black/Hispanic  
2  Not Black/Hispanic  
3  Unknown

Fill items 1-7a, 8 and 10 as applicable; 11, 13-17.

**TYPE B**

- 06  Vacant, nonseasonal  
07  Vacant, seasonal  
08  Occupied entirely by URE  
09  Occupied entirely by AF members  
10  Occupied - screened out by household  
11  Occupied - screened out by neighbors  
12  Unfit or to be demolished  
13  Under construction - not ready  
14  Converted to temporary business or storage  
15  Unoccupied site for mobile home, trailer, or tent  
16  Permit granted - construction not started  
17  Other (Specify) \_\_\_\_\_

Fill items 1-7a, 8-10 as applicable; 11, 13-17.

- 18  Unused line of listing sheet  
19  Demolished  
20  House or trailer moved  
21  Outside segment boundaries  
22  Converted to permanent business or storage  
23  Merged  
24  Condemned  
25  Built after April 1, 1990  
26  Other (Specify) \_\_\_\_\_

Fill items 1-7a, 9c if marked; 13-17, send Inter-Comm.

**TYPE C**
**RT 10 33 17. Record of calls**
**59-69**

Month	Date	Beginning time	Ending time	Completed Mark (X)
1		P T	a.m. p.m.	a.m. p.m.
2		P T	a.m. p.m.	a.m. p.m.

Batch number	RT 10	Coder status	8
	3-7		

Book \_\_\_\_ of \_\_\_\_ books

OMB No. 0920-0214: Approval Expires 03/31/97

**Notice** - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m). Public reporting burden for this collection of information is estimated to average 30 minutes per response including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to PHS Reports Clearance Officer, ATTN: PRA (0920-0214); Hubert H. Humphrey Building, Room 737-F, 200 Independence Avenue, SW; Washington, DC 20201.

1. RO 9-10	2. Sample Suffix 11-13	3. Week 14	4. Segment type 15-16	FORM HIS-1 (1996) (8-1-95)																					
1 <input type="checkbox"/> Area 2 <input type="checkbox"/> Permit				U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS ACTING AS COLLECTING AGENT FOR THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE																					
5. Control number PSU Segment Suffix Serial Suffix Check digit 17-21 22-25 26-27 28-29 30 31				6. Screening status 1 <input type="checkbox"/> S 32 2 <input type="checkbox"/> I																					
RT 11 7a. What is your exact address? (Including House No., Apt. No., or other identification; county and ZIP Code)				4-8																					
3				LISTING SHEET 9-119																					
S. T. (Item 4)				Sheet																					
City		State		County ZIP Code																					
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c. GQ name		84-117 Sample unit No.		Type code 118-120																					
8. YEAR BUILT (Area segments only) <input type="checkbox"/> Ask (Except for group quarters, mobile homes, trailers, tents, boats, and other units not in structures.) <input type="checkbox"/> Do not ask <b>When was this structure originally built?</b> <input type="checkbox"/> Before 4-1-90 (Continue interview) <input type="checkbox"/> After 4-1-90 (Complete 9c w/o required; END interview)																									
9. COVERAGE QUESTIONS <input type="checkbox"/> Ask items that are marked <input type="checkbox"/> Do not ask <b>a. <input type="checkbox"/> Are there any other living quarters — either occupied or vacant — in this building?</b> <input type="checkbox"/> Yes (Fill Table X) <input type="checkbox"/> No <b>b. <input type="checkbox"/> Are there any other living quarters — either occupied or vacant — on this floor?</b> <input type="checkbox"/> Yes (Fill Table X) <input type="checkbox"/> No <b>c. <input type="checkbox"/> Is there any other building, mobile home, or trailer — either occupied or vacant — on this property for people to live in?</b> <input type="checkbox"/> Yes (Fill Table X) <input type="checkbox"/> No																									
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17. Record of calls RT 10 33 59-69																									
<table border="1"> <thead> <tr> <th>Month</th> <th>Date</th> <th>Beginning time</th> <th>Ending time</th> <th>Completed Mark (X)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>T</td> <td>P a.m.</td> <td>a.m.</td> <td></td> </tr> <tr> <td>2</td> <td>T</td> <td>P a.m.</td> <td>a.m.</td> <td></td> </tr> <tr> <td></td> <td></td> <td>P p.m.</td> <td>p.m.</td> <td></td> </tr> </tbody> </table>						Month	Date	Beginning time	Ending time	Completed Mark (X)	1	T	P a.m.	a.m.		2	T	P a.m.	a.m.				P p.m.	p.m.	
Month	Date	Beginning time	Ending time	Completed Mark (X)																					
1	T	P a.m.	a.m.																						
2	T	P a.m.	a.m.																						
		P p.m.	p.m.																						
34																									

# 20 PAGES LONG

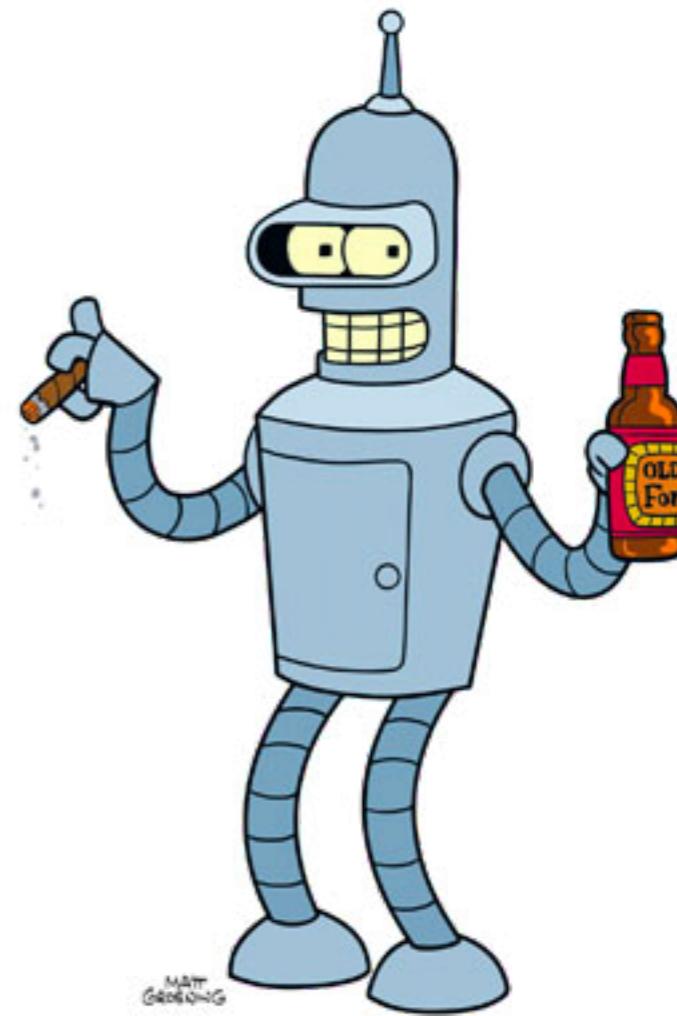


# Bugs in Deployment

# Bugs in Deployment



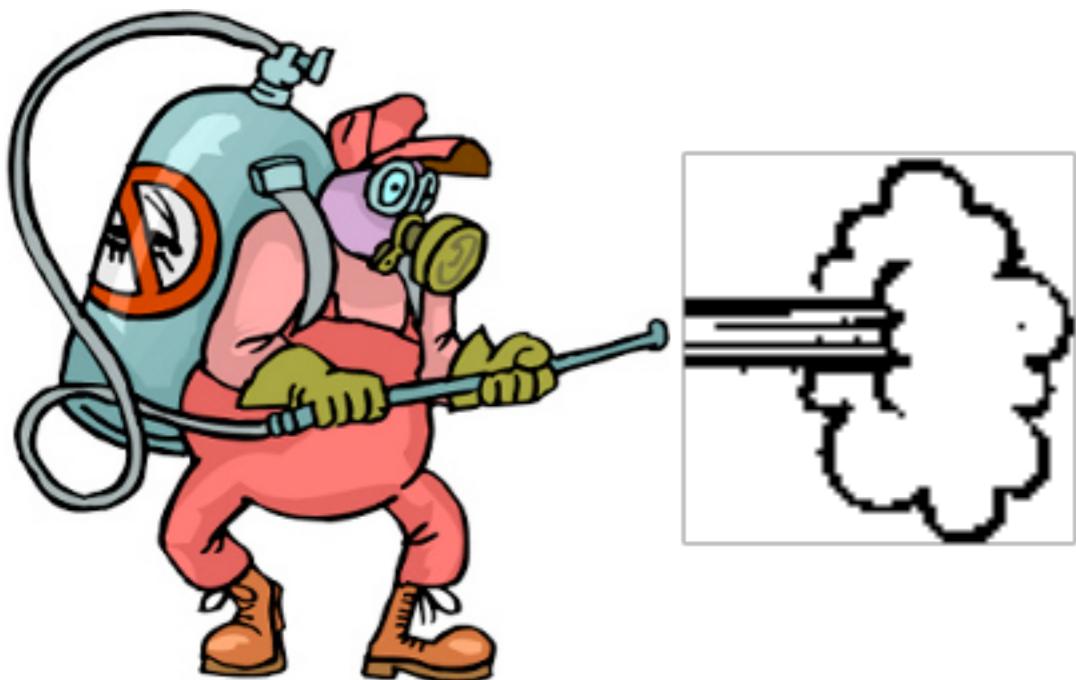
# Bugs in Deployment



# Bugs in Deployment



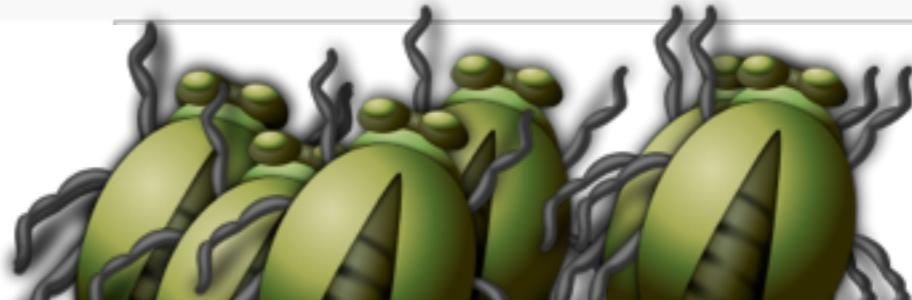
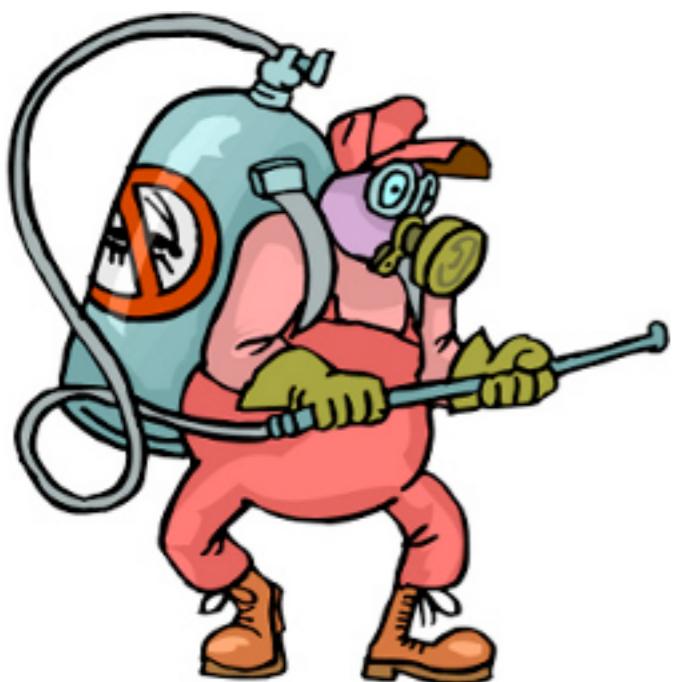
**RESULTS INVALID**



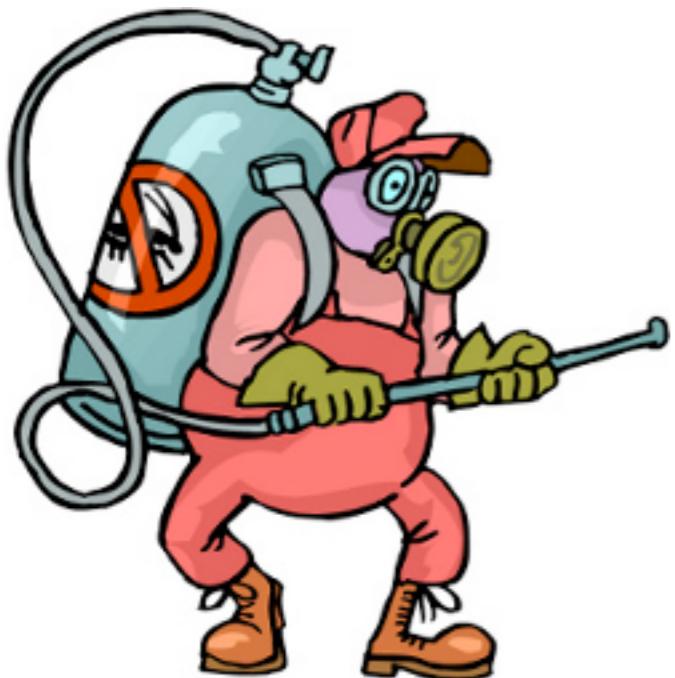
	A	B	C	D	E	F	G
1	question	options	block	1	ordered	branch	
2	There are two ve	Control					2
3		Experimental					3
4	On a typical ecor	Strongly Disagre	3..1			TRUE	
5		Disagree					
6		Neutral					
7		Agree					
8		Strongly Agree					
9	On a typical ecor	Strongly Disagre					
10		Disagree					
11		Neutral					
12		Agree					
13		Strongly Agree					
14	It is acceptable t	Strongly Disagre		1	1		7
15		Disagree					7
16		Neutral					7
17		Agree					7
18		Strongly Agree					7
19	On a typical ecor	Strongly Disagre		q2		TRUE	7
20		Disagree					7
21		Neutral					7
22		Agree					7
23		Strongly Agree					7
24	On a typical ecor	Strongly Disagre		0		TRUE	7
25		Disagree					7
26		Neutral					7
27		Agree					7
28		Strongly Agree					7
29	It is acceptable t	Strongly Disagre		2.2	q2	TRUE	7
30		Disagree					7
31		Neutral					7
32		Agree					7
33		Strongly Agree					7
34	If it were permitte	Strongly Disagre	3..3	q3		TRUE	

question

	A	B	C	D	E	F	G
1	question	options	block	correlation	ordered	branch	
2	There are two ve	Control	1				2
3		Experimental					3
4	On a typical econ	Strongly Disagre	3._1	q1	TRUE		
5		Disagree					
6		Neutral					
7		Agree					
8		Strongly Agree					
9	On a typical econ	Strongly Disagre	3._1	q1	TRUE		
10		Disagree					
11		Neutral					
12		Agree					
13		Strongly Agree					
14	It is acceptable t	Strongly Disagre	2.1	q1	TRUE		7
15		Disagree					7
16		Neutral					7
17		Agree					7
18		Strongly Agree					7
19	On a typical econ	Strongly Disagre	3._2	q2	TRUE		7
20		Disagree					7
21		Neutral					7
22		Agree					7
23		Strongly Agree					7
24	On a typical econ	Strongly Disagre	3._2	q2	TRUE		
25		Disagree					
26		Neutral					
27		Agree					
28		Strongly Agree					
29	It is acceptable t	Strongly Disagre	2.2	q2	TRUE		
30		Disagree					
31		Neutral					
32		Agree					
33		Strongly Agree					
34	If it were permitte	Strongly Disagre	3._3	q3	TRUE		



# Diagnosis: Order Bias



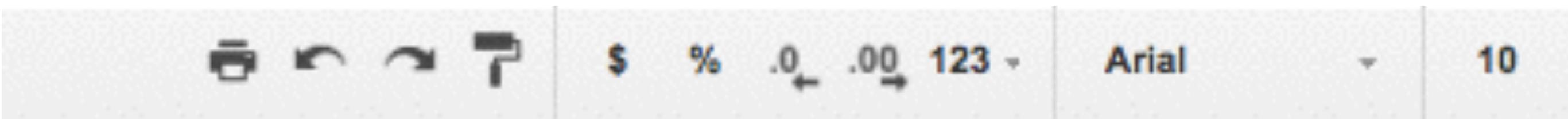
**Do you favor or oppose  
(2) allowing gays and lesbians to  
enter into legal agreements that  
give them the same rights as  
married couples?**

- Favor (**45%**)
- Oppose (47%)

**(1) Do you favor or oppose allowing  
gays and lesbians to enter into  
legal agreements that give them  
the same rights as married  
couples?**

- Favor (**37%**)
- Oppose (55%)

# SurveyMan Example



A screenshot of a Microsoft Word document interface. The ribbon at the top shows font settings: Arial, 10pt. Below the ribbon is a table with 8 rows and 2 columns. The first column contains row numbers 1 through 7. The second column contains survey questions and options. The table has a header row with columns labeled A and B.

	A	B
1	<b>QUESTION</b>	<b>OPTIONS</b>
2	How often do you vote?	Always
3		Sometimes
4		Never
5	Do you favor or oppose taking military action in Iraq?	Yes
6		No
7		Maybe

# SurveyMan Example

A screenshot of a Microsoft Excel spreadsheet titled "SurveyMan Example". The spreadsheet has three columns: Row 1 contains column headers "A" and "B"; Row 2 contains the question "How often do you vote?" and its corresponding options "Always", "Sometimes", and "Never"; Rows 3 through 7 contain another question "Do you favor or oppose taking military action in Iraq?" and its corresponding options "Yes", "No", and "Maybe". The question in Row 2 is circled in red.

	A	B
1	QUESTION	OPTIONS
2	How often do you vote?	Always
3		Sometimes
4		Never
5	Do you favor or oppose taking military action in Iraq?	Yes
6		No
7		Maybe

# SurveyMan Example

A screenshot of a Microsoft Excel spreadsheet titled "SurveyMan Example". The spreadsheet has three columns: Row 1 contains column headers "A" and "B"; Row 2 contains the question "How often do you vote?" and its corresponding options "Always", "Sometimes", and "Never"; Row 5 contains the question "Do you favor or oppose taking military action in Iraq?" and its corresponding options "Yes", "No", and "Maybe". The questions in rows 2 and 5 are circled in red.

	A	B
1	QUESTION	OPTIONS
2	How often do you vote?	Always Sometimes Never
3		
4		
5	Do you favor or oppose taking military action in Iraq?	Yes No Maybe
6		
7		



$Q_A$

$Q_B$

$Q_C$

$Q_D$

$Q_D$  $Q_C$  $Q_A$  $Q_B$

# Diagnosis: Order Bias

$$Q_A \prec Q_B$$
$$Q_B \prec Q_A$$

Always		Yes	
Sometimes		No	
Never		Maybe	

Yes		Always	
No		Sometimes	
Maybe		Never	

# Diagnosis: Order Bias



$$Q_A \prec Q_B$$

$$Q_B \prec Q_A$$

Always		Yes	
Sometimes		No	
Never		Maybe	

Yes		Always	
No		Sometimes	
Maybe		Never	

# Diagnosis: Order Bias



**Question A**

$$Q_A \prec Q_B$$

$$Q_B \prec Q_A$$

Always		Yes	
Sometimes		No	
Never		Maybe	

Yes		Always	
No		Sometimes	
Maybe		Never	

# Diagnosis: Order Bias



**Question A**

$$Q_A \prec Q_B$$

$$Q_B \prec Q_A$$

Always	1	Yes	
Sometimes		No	
Never		Maybe	

Yes		Always	
No		Sometimes	
Maybe		Never	

# Diagnosis: Order Bias



**Question B**

$$Q_A \prec Q_B$$

$$Q_B \prec Q_A$$

Always	1	Yes	
Sometimes		No	
Never		Maybe	

Yes		Always	
No		Sometimes	
Maybe		Never	

# Diagnosis: Order Bias



**Question B**

$$Q_A \prec Q_B$$

$$Q_B \prec Q_A$$

Always	1	Yes	
Sometimes		No	1
Never		Maybe	

Yes		Always	
No		Sometimes	
Maybe		Never	

# Diagnosis: Order Bias

$$Q_A \prec Q_B$$

$$Q_B \prec Q_A$$

Always	1	Yes	
Sometimes		No	1
Never		Maybe	

Yes		Always	
No		Sometimes	
Maybe		Never	

# Diagnosis: Order Bias



$$Q_A \prec Q_B$$

$$Q_B \prec Q_A$$

Always	1	Yes	
Sometimes		No	1
Never		Maybe	

Yes		Always	
No		Sometimes	
Maybe		Never	

# Diagnosis: Order Bias



Question B

$$Q_A \prec Q_B$$

$$Q_B \prec Q_A$$

Always	1	Yes	
Sometimes		No	1
Never		Maybe	

Yes		Always	
No		Sometimes	
Maybe		Never	

# Diagnosis: Order Bias



Question B

$$Q_A \prec Q_B$$

$$Q_B \prec Q_A$$

Always	1	Yes	
Sometimes		No	1
Never		Maybe	

Yes		Always	
No	1	Sometimes	
Maybe		Never	

# Diagnosis: Order Bias



Question A

$$Q_A \prec Q_B$$

$$Q_B \prec Q_A$$

Always	1	Yes	
Sometimes		No	1
Never		Maybe	

Yes		Always	
No	1	Sometimes	
Maybe		Never	

# Diagnosis: Order Bias



Question A

$$Q_A \prec Q_B$$

$$Q_B \prec Q_A$$

Always	1	Yes	
Sometimes		No	1
Never		Maybe	

Yes		Always	
No	1	Sometimes	1
Maybe		Never	

# Diagnosis: Order Bias

$Q_A$

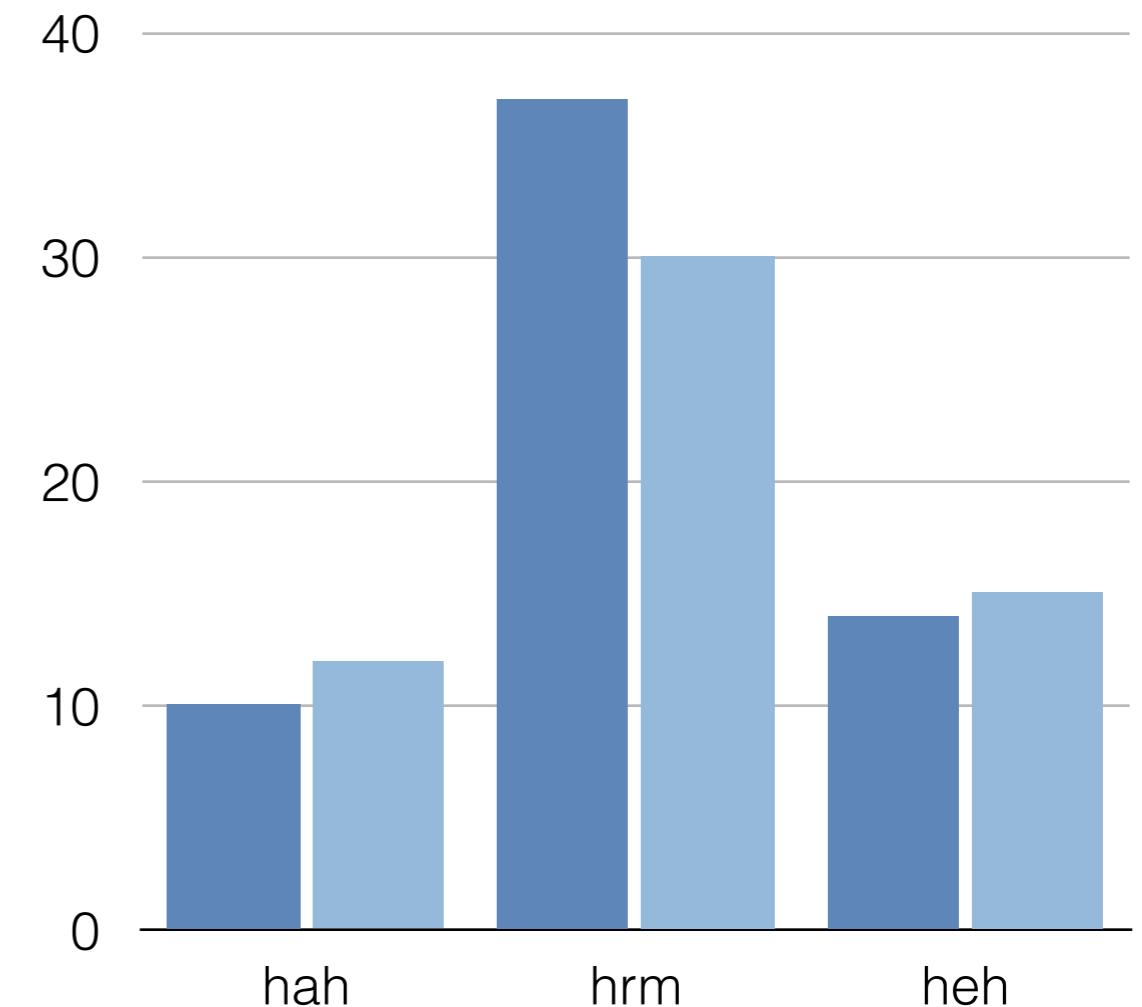
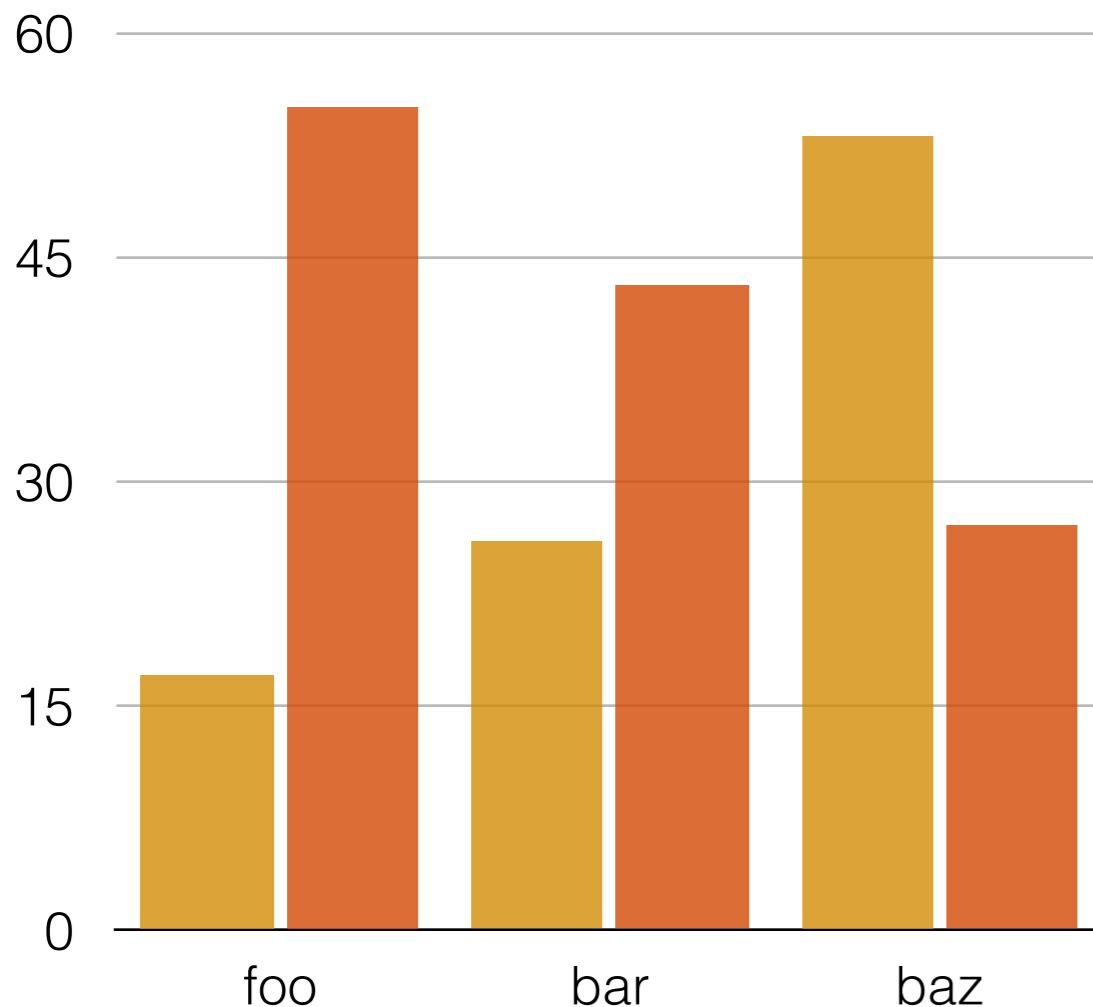
$Q_B$

■  $Q_A \prec Q_B$

■  $Q_B \prec Q_A$

■  $Q_A \prec Q_B$

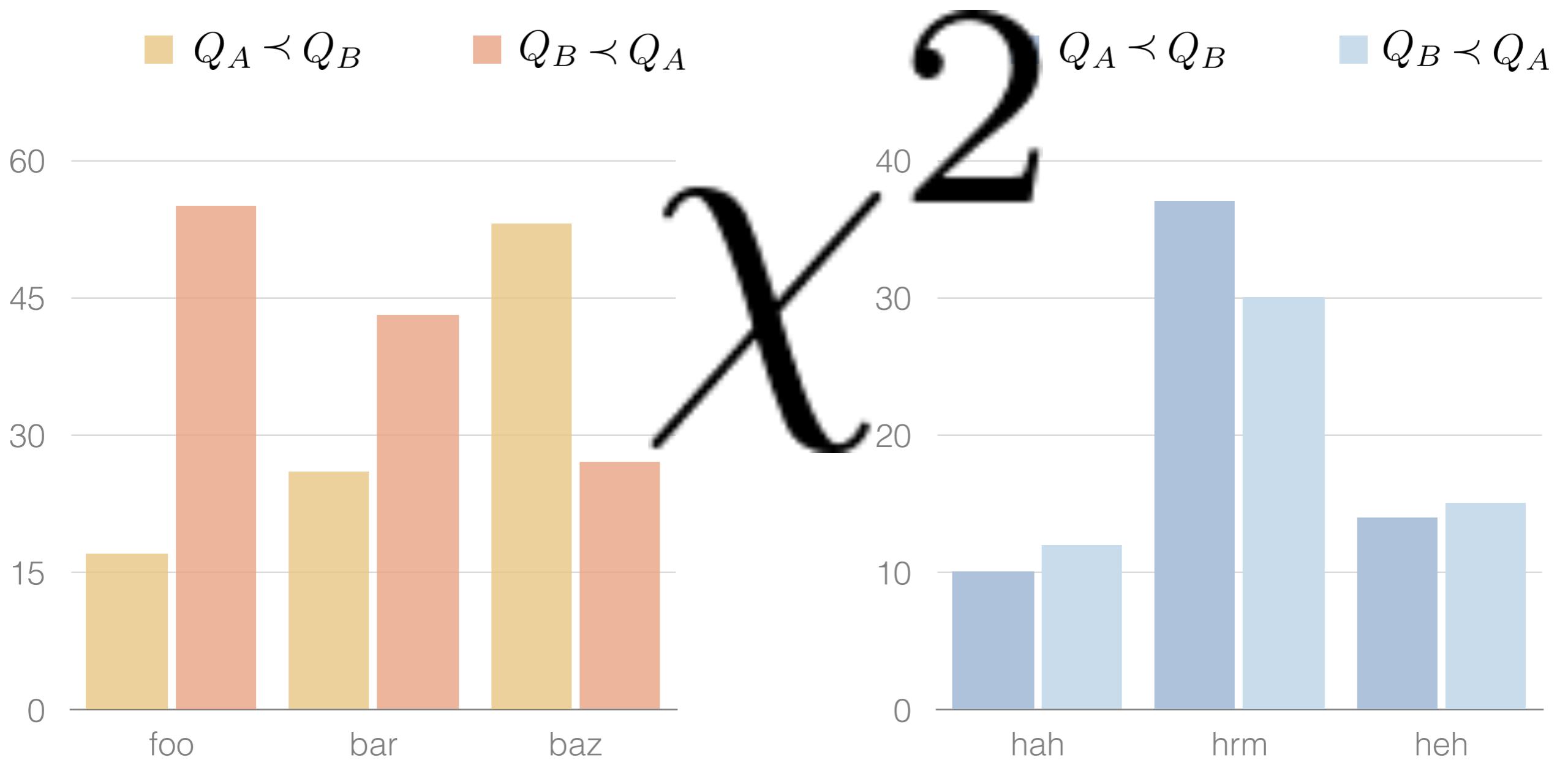
■  $Q_B \prec Q_A$



# Diagnosis: Order Bias

$Q_A$

$Q_B$



Order bias detected between Question  
“How often do you vote?” (line 2)  
and Question  
“Do you favor or oppose taking military  
action in Iraq?” (line 5) :

```
count q1 first: 40
count q2 first: 37
stat type : chi-squared
p-value : 0.02394083456
```

# Diagnosis: Wording Bias



**Do you favor or oppose taking military action in Iraq to end Saddam Hussein's rule?**

**68% in favor**

**Do you favor or oppose taking military action in Iraq to end Saddam Hussein's rule**

***even if it meant that U.S. forces might suffer thousands of casualties?***

**43% in favor**

# SurveyMan Example

The screenshot shows a Microsoft Excel spreadsheet with a tab bar at the top containing icons for print, refresh, and file, followed by currency symbols (\$ %), numbers (.0 .00 123), font styles (Arial), font size (10), bold (B), italic (I), underline (U), and alignment tools. Below the tab bar is a row of column headers labeled A through F. The data starts with a row 1 header: QUESTION, OPTIONS, EXCLUSIVE, ORDERED, BLOCK, and BRANCH. Rows 2 and 3 show options for "How often do you vote?", while rows 5 and 6 show options for "Do you favor or oppose taking military action in Iraq?". Rows 8 and 9 show options for a more complex question about military action even if it means thousands of casualties. Row 10 is empty.

	A	B	C	D	E	F
1	QUESTION	OPTIONS	EXCLUSIVE	ORDERED	BLOCK	BRANCH
2	How often do you vote?	Always	TRUE	FALSE	1	
3		Sometimes				
4		Never				
5	Do you favor or oppose taking military action in Iraq?	Yes	TRUE	FALSE	1.a1	NEXT
6		No				
7		Maybe				
8	Do you favor or oppose taking military action in Iraq, even if it meant that U.S. forces might suffer thousands of casualties?	Yes	TRUE	FALSE	1.a1	NEXT
9		No				
10		Maybe				

# SurveyMan Example

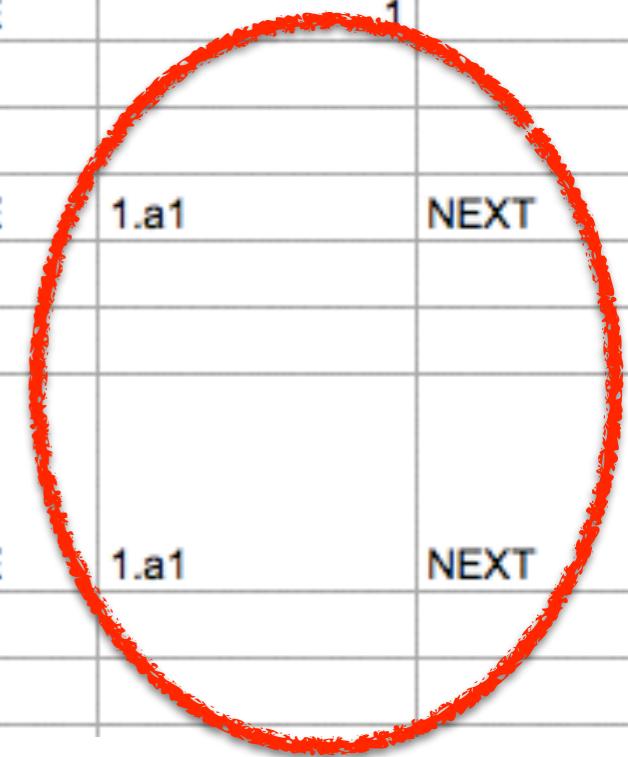
The screenshot shows a software interface for creating surveys, specifically SurveyMan. The window has a toolbar at the top with various icons for file operations, font selection, and layout. Below the toolbar is a grid-based survey template.

	A	B	C	D	E	F
1	QUESTION	OPTIONS	EXCLUSIVE	ORDERED	BLOCK	BRANCH
2	How often do you vote?	Always	TRUE	FALSE	1	
3		Sometimes				
4		Never				
5	Do you favor or oppose taking military action in Iraq?	Yes	TRUE	FALSE	1.a1	NEXT
6		No				
7		Maybe				
8	Do you favor or oppose taking military action in Iraq, even if it meant that U.S. forces might suffer thousands of casualties?	Yes	TRUE	FALSE	1.a1	NEXT
9		No				
10		Maybe				

Red ovals highlight two specific rows in the survey template:

- The first oval highlights row 5, which contains the question "Do you favor or oppose taking military action in Iraq?" and its three response options: Yes, No, and Maybe.
- The second oval highlights row 8, which contains a more detailed version of the same question: "Do you favor or oppose taking military action in Iraq, even if it meant that U.S. forces might suffer thousands of casualties?" and its three response options: Yes, No, and Maybe.

# SurveyMan Example



	A	B	C	D	E	F
1	QUESTION	OPTIONS	EXCLUSIVE	ORDERED	BLOCK	BRANCH
2	How often do you vote?	Always	TRUE	FALSE		1
3		Sometimes				
4		Never				
5	Do you favor or oppose taking military action in Iraq?	Yes	TRUE	FALSE	1.a1	NEXT
6		No				
7		Maybe				
8	Do you favor or oppose taking military action in Iraq, even if it meant that U.S. forces might suffer thousands of casualties?	Yes	TRUE	FALSE	1.a1	NEXT
9		No				
10		Maybe				

# Diagnosis: Wording Bias

$Q_{A_1}$

$Q_{A_2}$

$Q_{A_3}$

$Q_{A_4}$

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

# Diagnosis: Wording Bias



$Q_{A_1}$

$Q_{A_2}$

$Q_{A_3}$

$Q_{A_4}$

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

# Diagnosis: Wording Bias



$Q_{A_1}$

$Q_{A_1}$

$Q_{A_2}$

$Q_{A_3}$

$Q_{A_4}$

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

# Diagnosis: Wording Bias



$Q_{A_1}$

$Q_{A_1}$

$Q_{A_2}$

$Q_{A_3}$

$Q_{A_4}$

<b>Always</b>	
<b>Sometimes</b>	1
<b>Never</b>	

<b>Always</b>	
<b>Sometimes</b>	
<b>Never</b>	

<b>Always</b>	
<b>Sometimes</b>	
<b>Never</b>	

<b>Always</b>	
<b>Sometimes</b>	
<b>Never</b>	

# Diagnosis: Wording Bias

$Q_{A_1}$

$Q_{A_2}$

$Q_{A_3}$

$Q_{A_4}$

Always	
Sometimes	1
Never	

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

# Diagnosis: Wording Bias



$Q_{A_1}$

$Q_{A_2}$

$Q_{A_3}$

$Q_{A_4}$

<b>Always</b>	
<b>Sometimes</b>	1
<b>Never</b>	

<b>Always</b>	
<b>Sometimes</b>	
<b>Never</b>	

<b>Always</b>	
<b>Sometimes</b>	
<b>Never</b>	

<b>Always</b>	
<b>Sometimes</b>	
<b>Never</b>	

# Diagnosis: Wording Bias



$Q_{A_3}$

$Q_{A_1}$

$Q_{A_2}$

$Q_{A_3}$

$Q_{A_4}$

Always	
Sometimes	1
Never	

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

Always	
Sometimes	
Never	

# Diagnosis: Wording Bias



$Q_{A_3}$

$Q_{A_1}$

$Q_{A_2}$

$Q_{A_3}$

$Q_{A_4}$

Always	
Sometimes	1
Never	

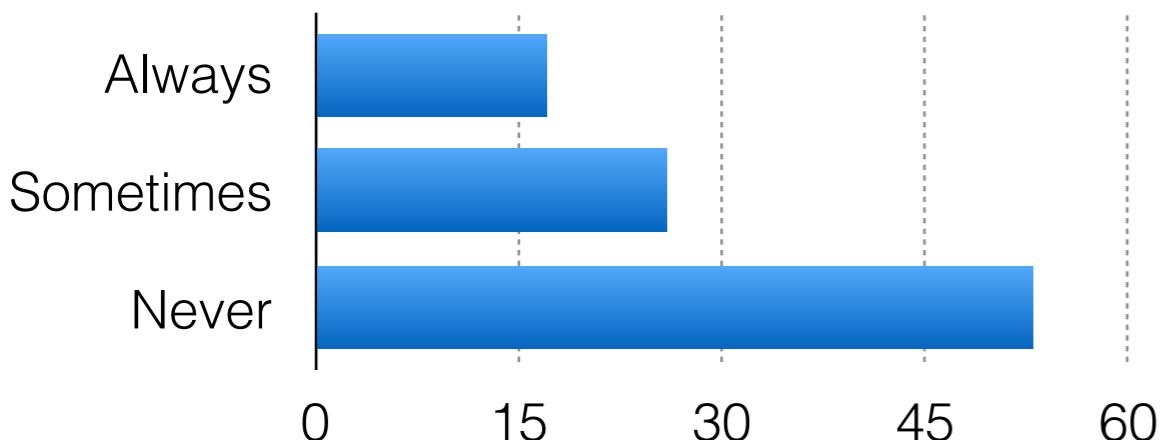
Always	
Sometimes	
Never	

Always	
Sometimes	1
Never	

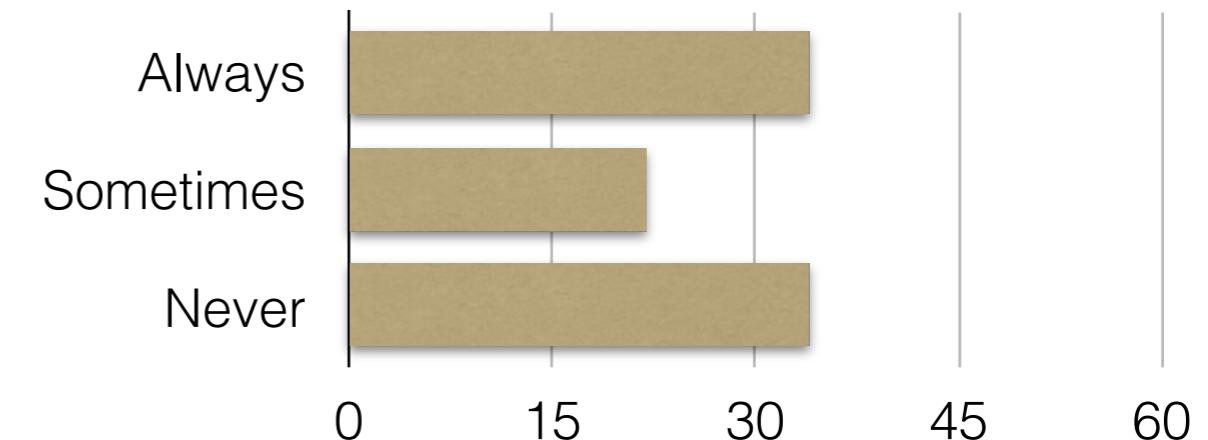
Always	
Sometimes	
Never	

# Diagnosis: Wording Bias

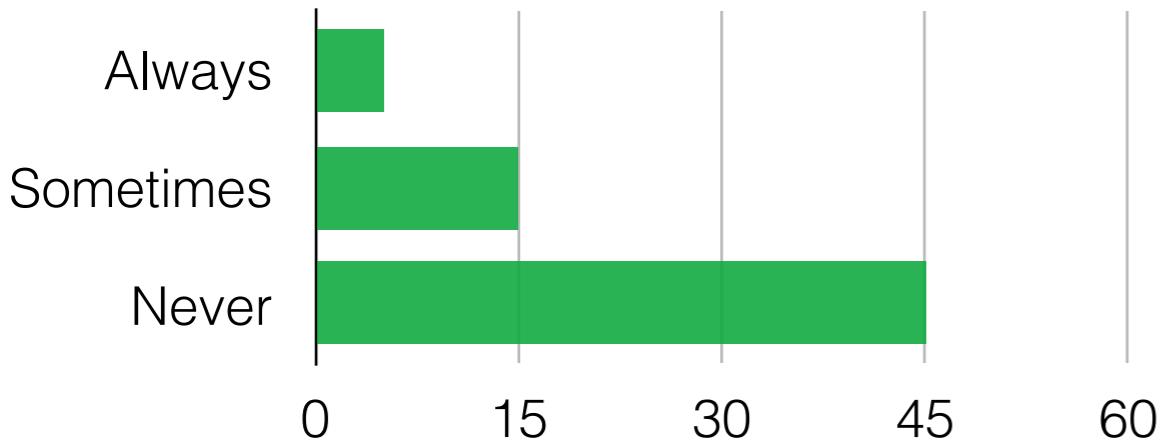
$Q_{A_1}$



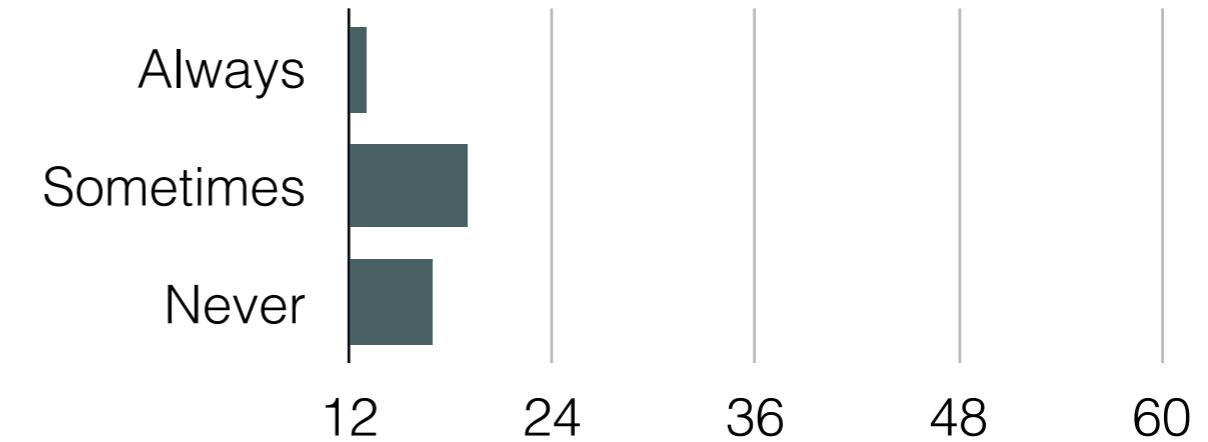
$Q_{A_3}$



$Q_{A_2}$

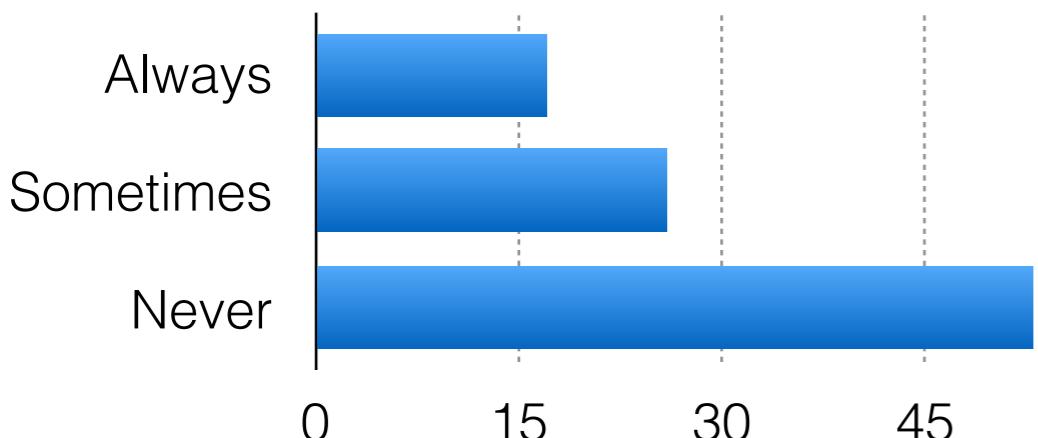


$Q_{A_4}$

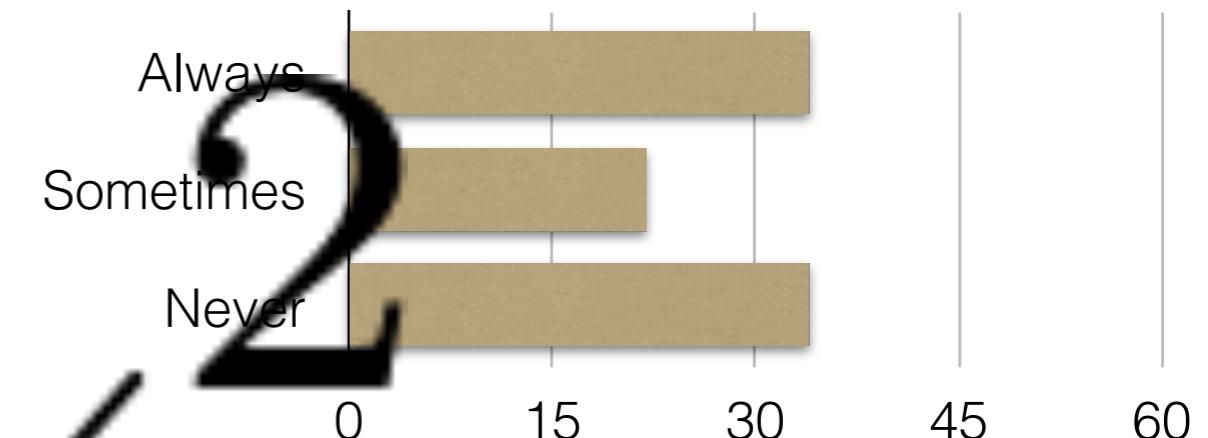


# Diagnosis: Wording Bias

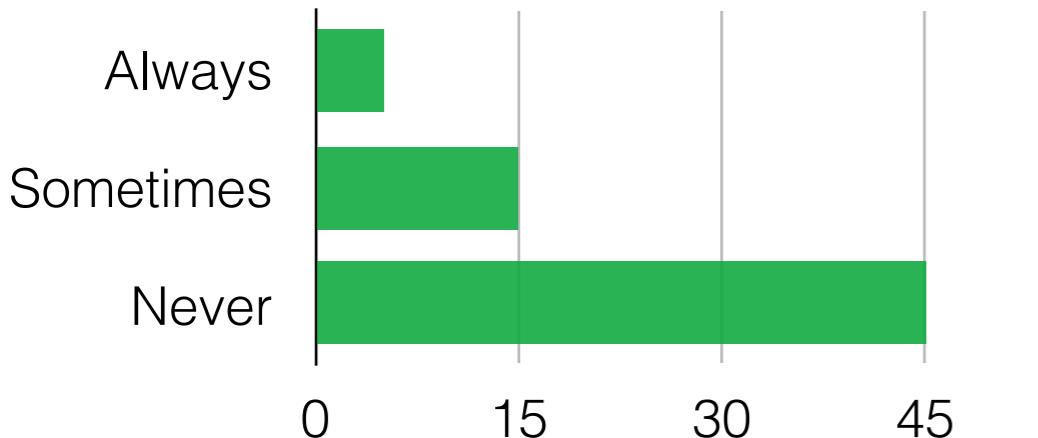
$Q_{A_1}$



$Q_{A_3}$



$Q_{A_2}$



$Q_{A_4}$



Always  
Sometimes  
Never

**Wording bias detected between Question  
"Do you favor or oppose taking military  
action in Iraq?" (line 5)**

**and Question**

**"Do you favor or oppose taking military  
action in Iraq, even if it meant that  
U.S. forces might suffer thousands of  
casualties?" (line 8)**

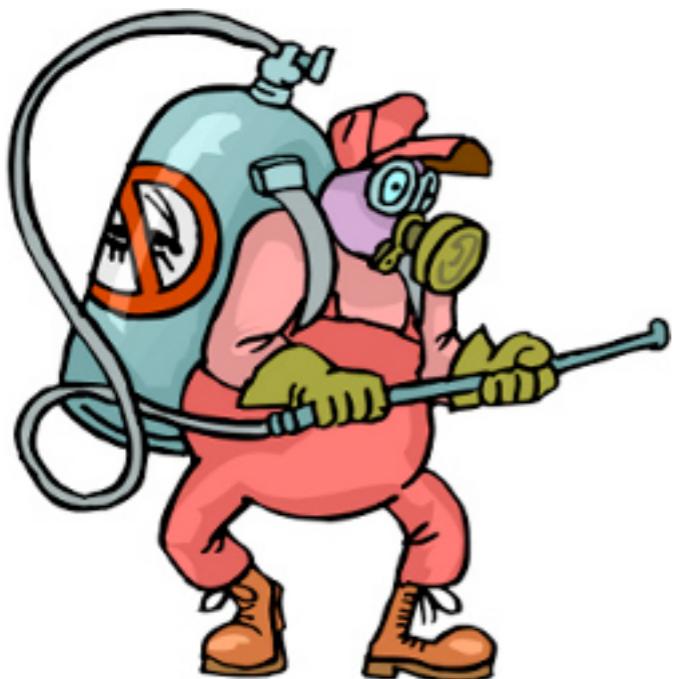
**count q1: 28**

**count q2: 32**

**stat type : chi-squared**

**p-value : 0.00123987**

# Diagnosis: Breakoff & Abandonment



<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	
<b>Pos. 4</b>	

$Q_A$	
$Q_B$	
$Q_C$	
$Q_D$	

<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	
<b>Pos. 4</b>	

$Q_A$	
$Q_B$	
$Q_C$	
$Q_D$	



<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	
<b>Pos. 4</b>	

$Q_A$	
$Q_B$	
$Q_C$	
$Q_D$	



**Question A**

<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	
<b>Pos. 4</b>	

$Q_A$	
$Q_B$	
$Q_C$	
$Q_D$	



**Question A**

**Question C**

<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	
<b>Pos. 4</b>	

$Q_A$	
$Q_B$	
$Q_C$	
$Q_D$	



**Question A**

**Question C**

**Question B**

<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	1
<b>Pos. 4</b>	

$Q_A$	
$Q_B$	1
$Q_C$	
$Q_D$	



**Question A**

**Question C**

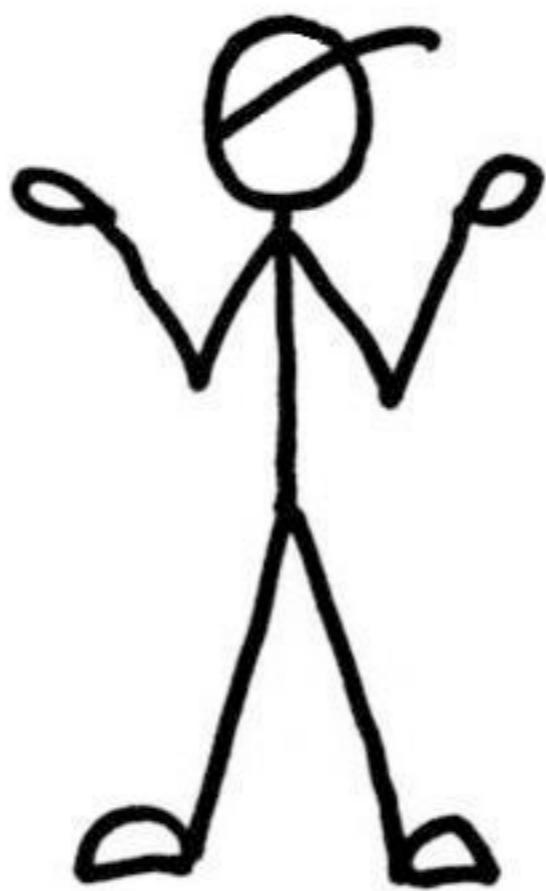
**Question B**

<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	1
<b>Pos. 4</b>	

$Q_A$	
$Q_B$	1
$Q_C$	
$Q_D$	

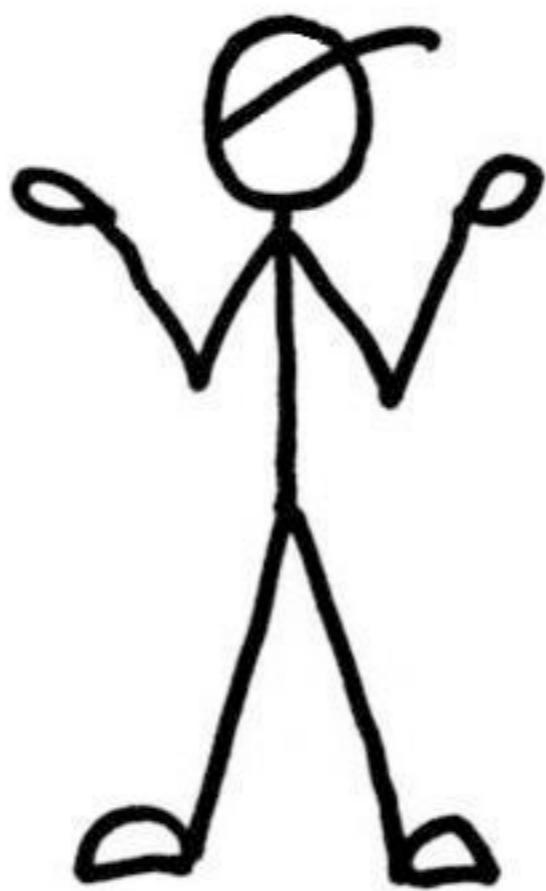
<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	1
<b>Pos. 4</b>	

$Q_A$	
$Q_B$	1
$Q_C$	
$Q_D$	



<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	1
<b>Pos. 4</b>	

$Q_A$	
$Q_B$	1
$Q_C$	
$Q_D$	



**Question C**

<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	1
<b>Pos. 4</b>	

$Q_A$	
$Q_B$	1
$Q_C$	
$Q_D$	

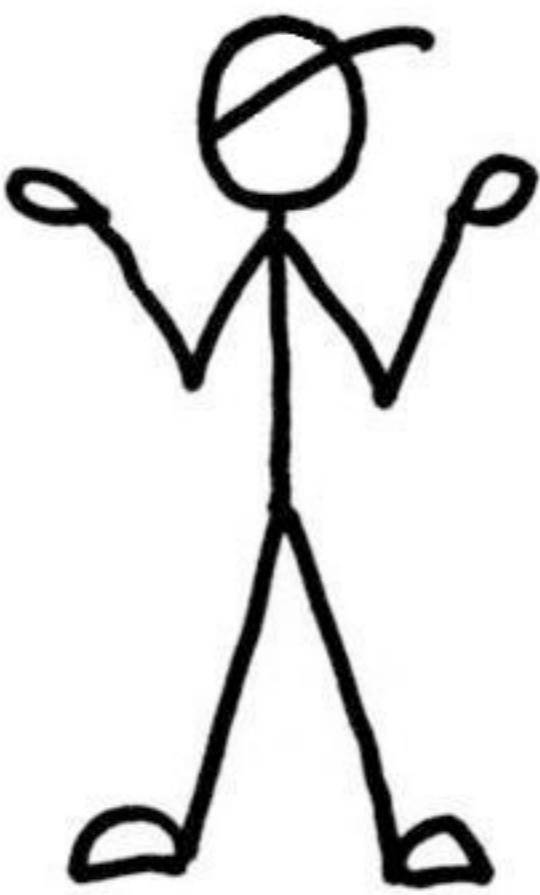


**Question C**

**Question B**

<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	1
<b>Pos. 4</b>	

$Q_A$	
$Q_B$	1
$Q_C$	
$Q_D$	



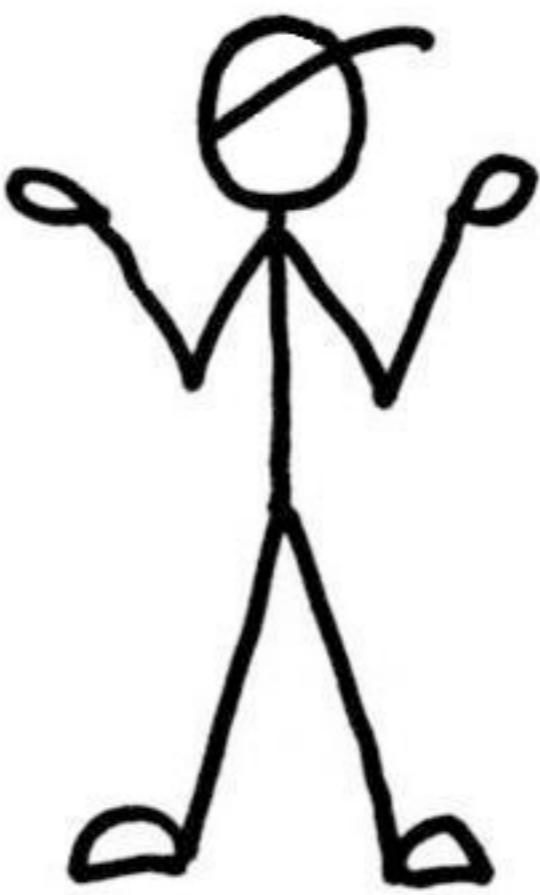
**Question C**

**Question B**

**Question A**

<b>Pos. 1</b>	
<b>Pos. 2</b>	
<b>Pos. 3</b>	2
<b>Pos. 4</b>	

$Q_A$	1
$Q_B$	1
$Q_C$	
$Q_D$	



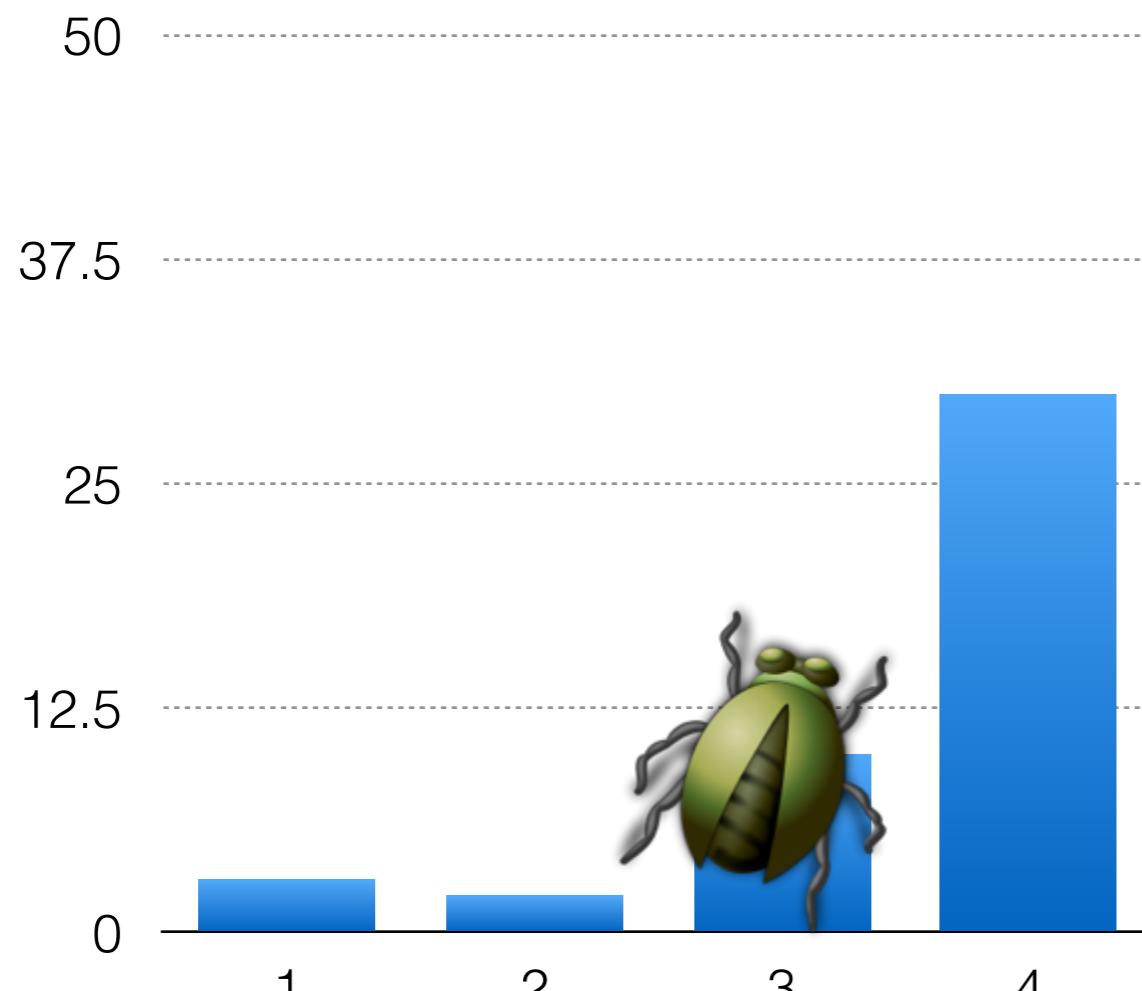
**Question C**

**Question B**

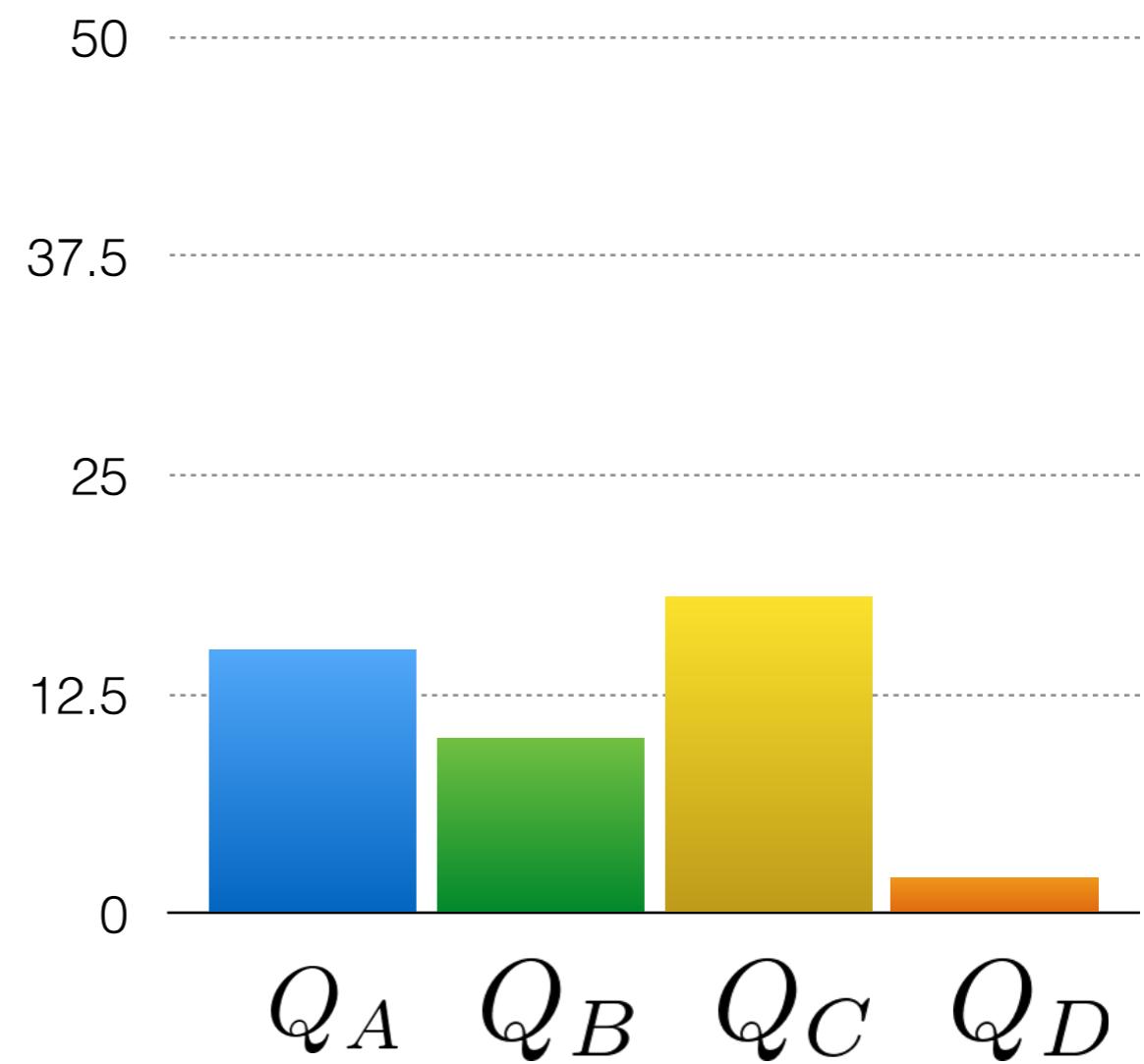
**Question A**

# Survey Too Long?

**Breakoff by Position**



**Breakoff by Question**



**Top 50% Breakoff by Position:**

**Pos. 3, Count 10**

**Pos. 1, Count 5**

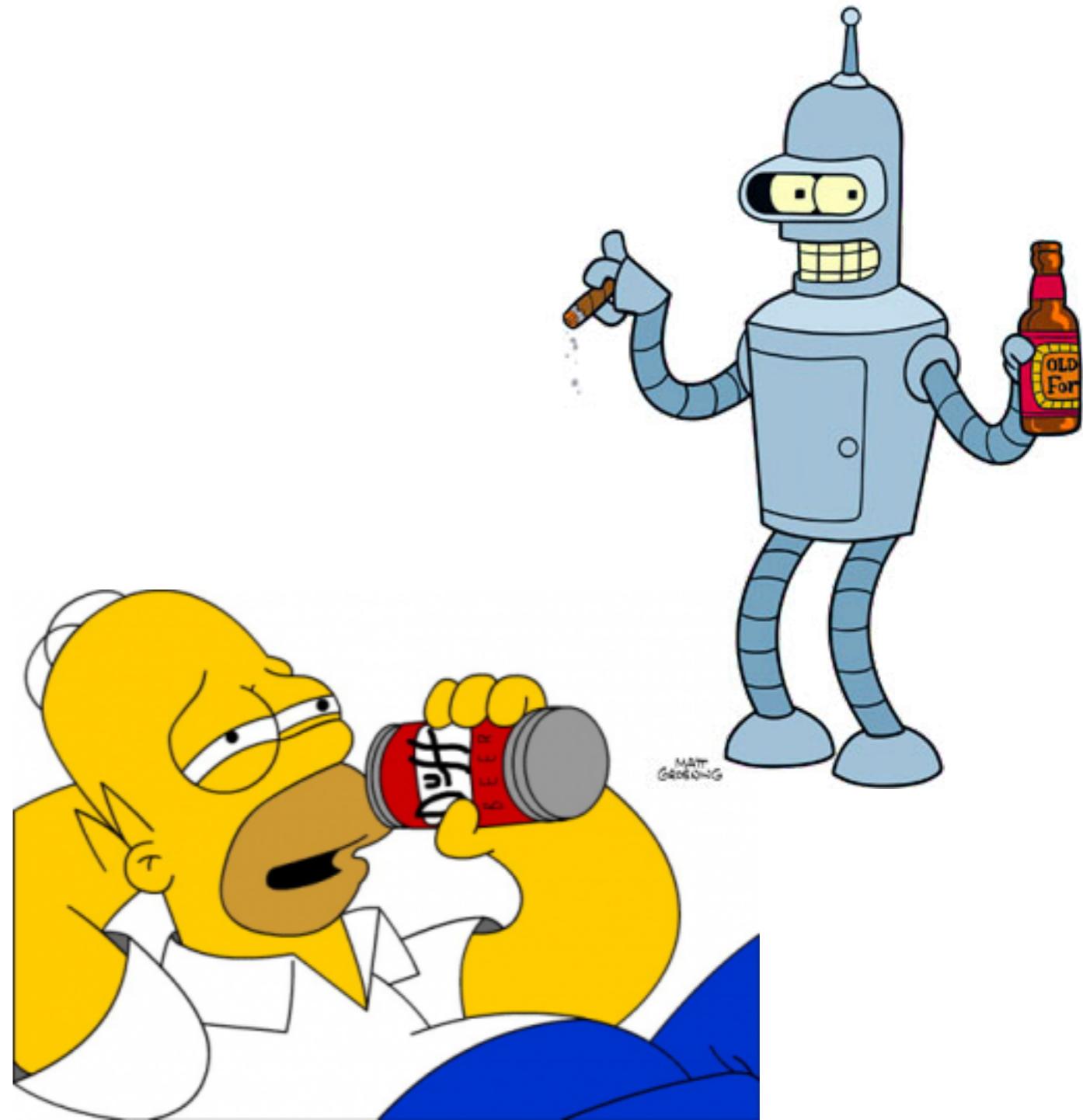
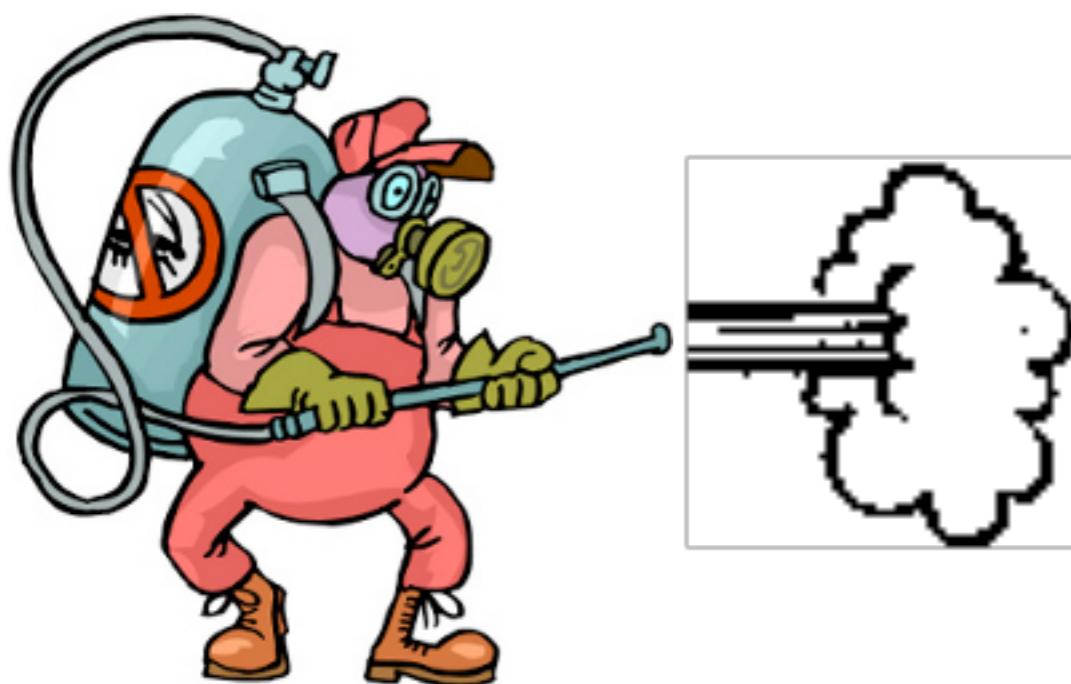
**Pos. 2, Count 2**

**Top 50% Breakoff by Question:**

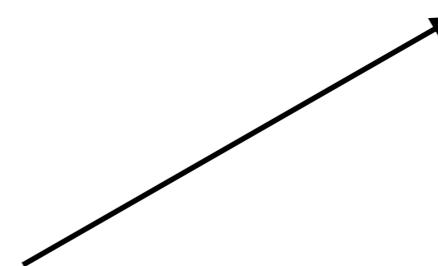
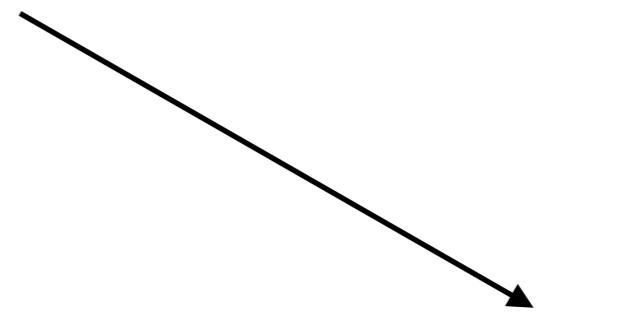
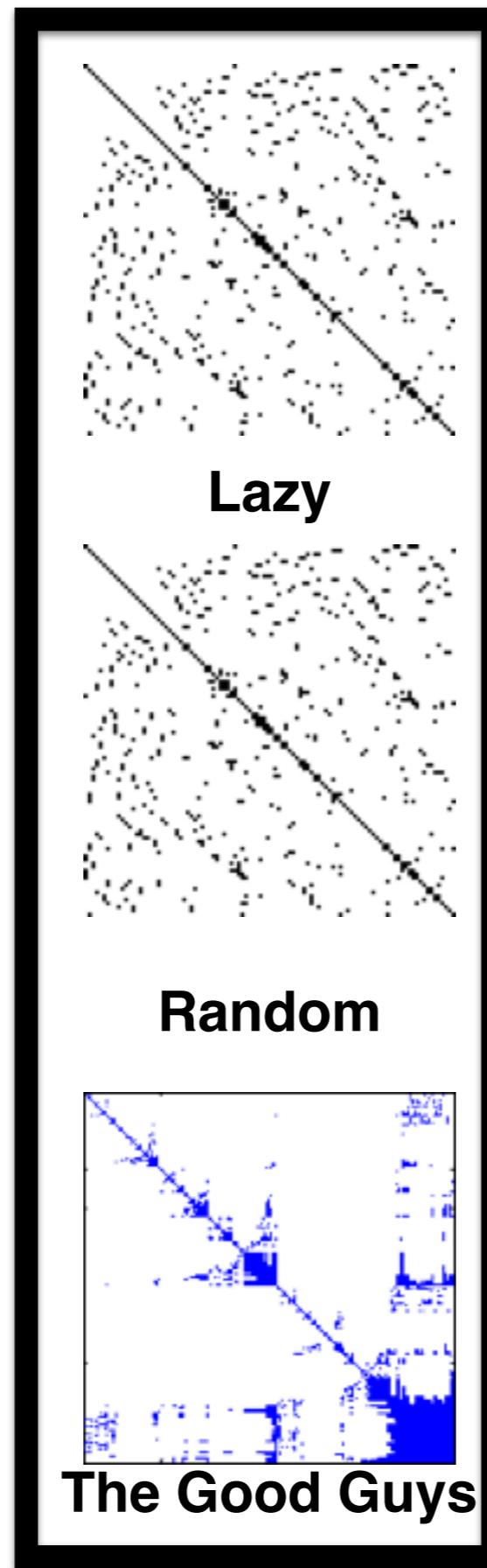
**Question C, Count 15**

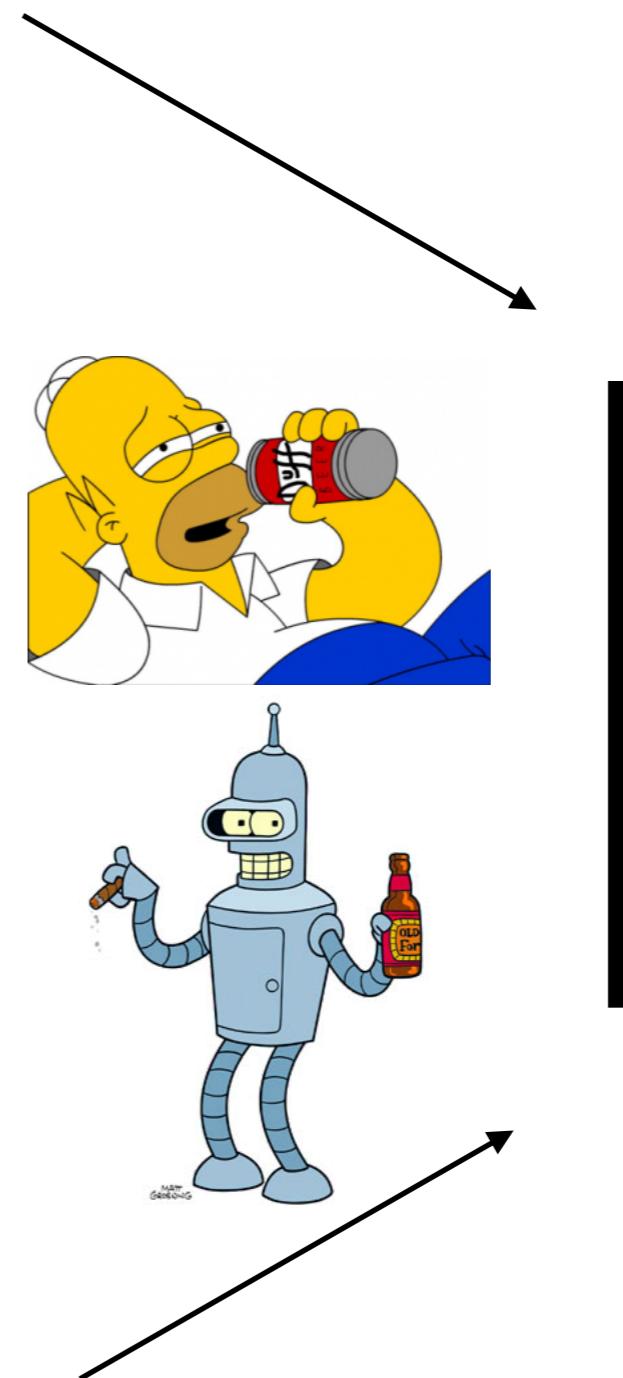
**Question A, Count 13**

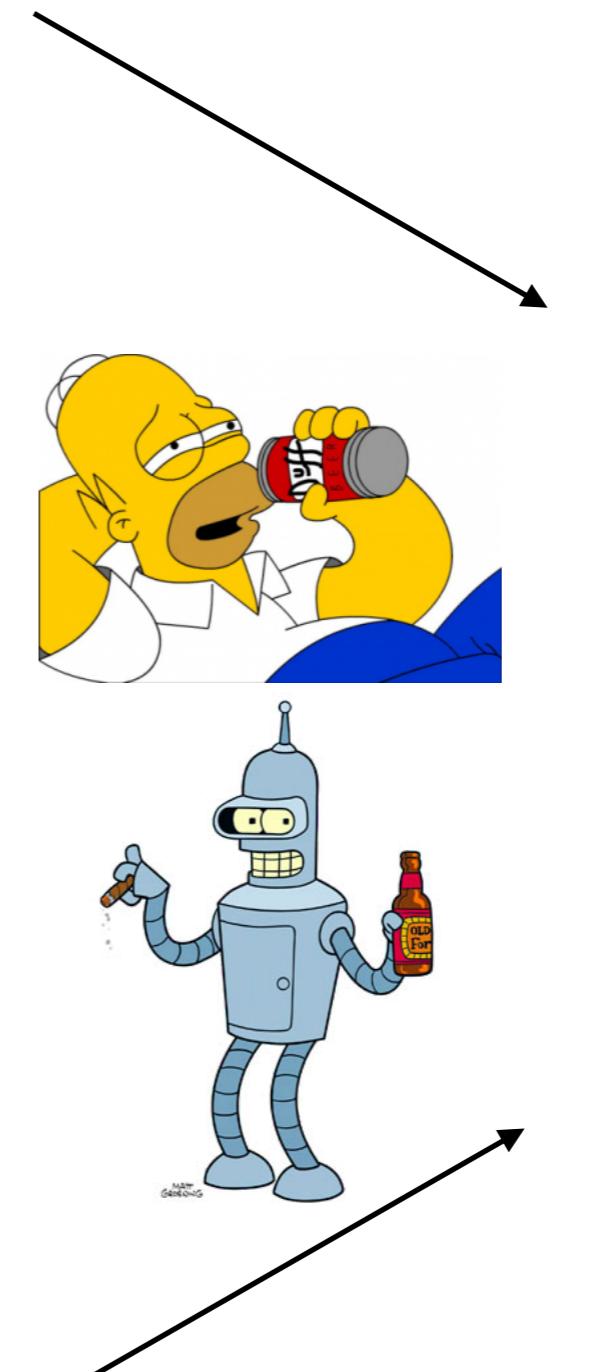
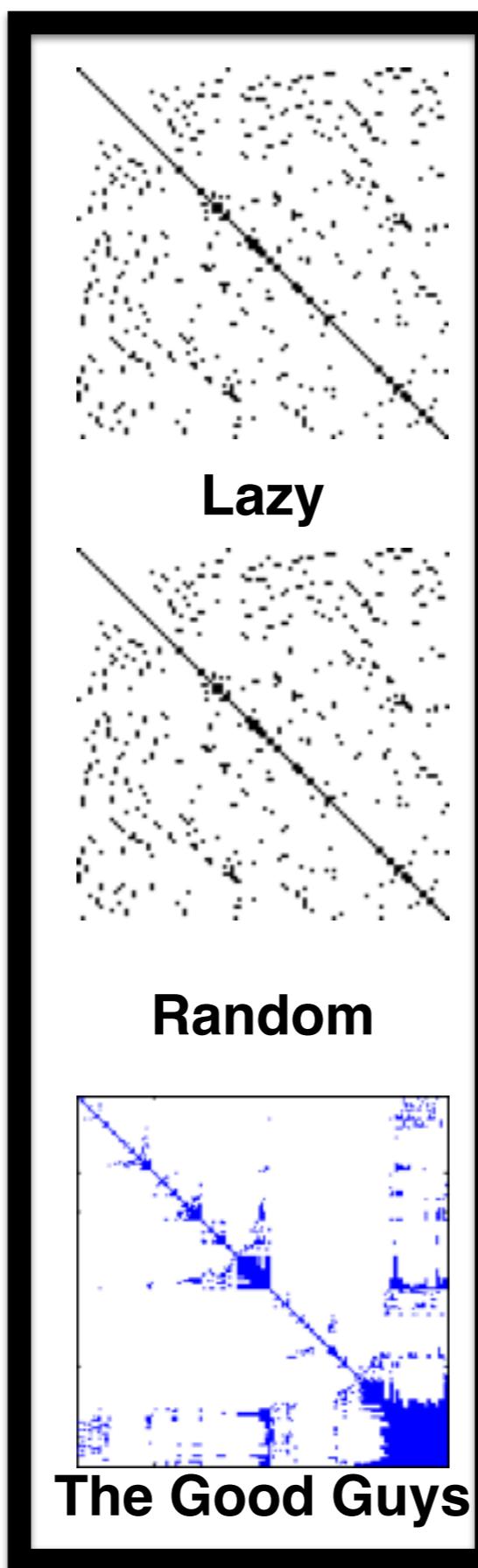
# Diagnosis: Bad Actors











# Case Studies

- Linguistics: Phonology
- **Psycholinguistics: Prototypicality**
- Labor Studies: Wage Negotiation

# How representative of a chair is this image?



**How representative of the category of odd numbers is this number?**

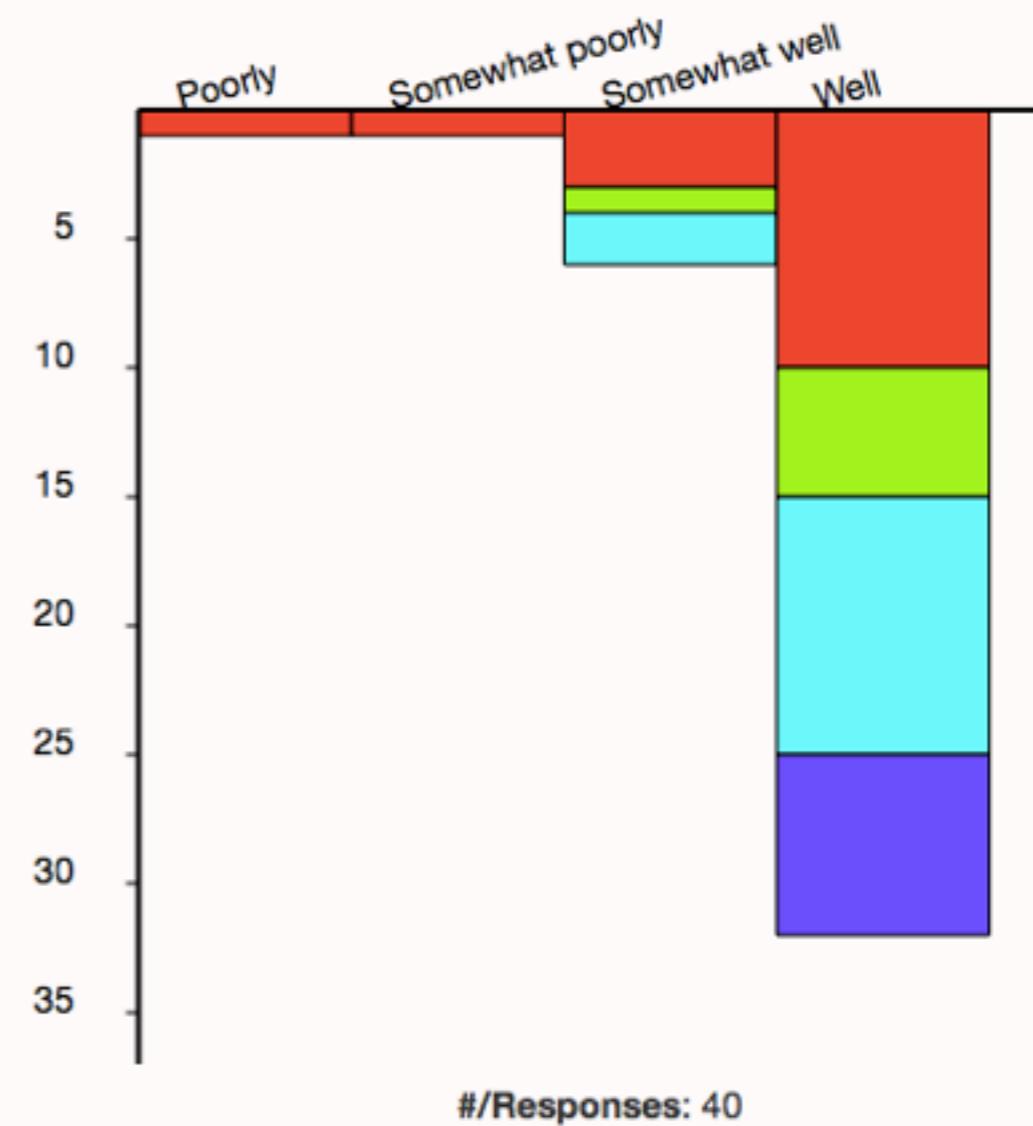
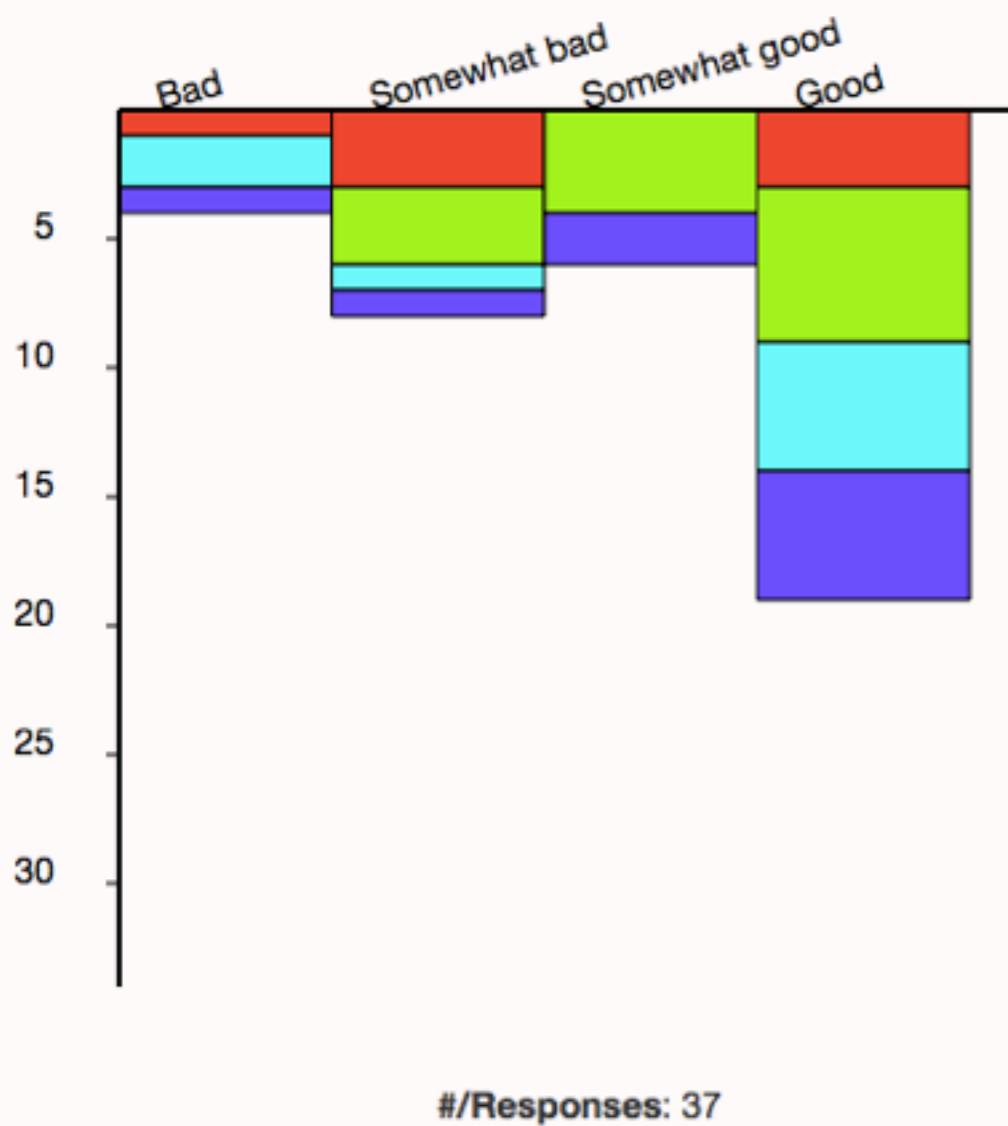
**787**

# Wording Bias

pVal: 0.014407395337783568

How good an example of an odd number is the number 463?

How well does the number 463 represent the category of odd numbers?



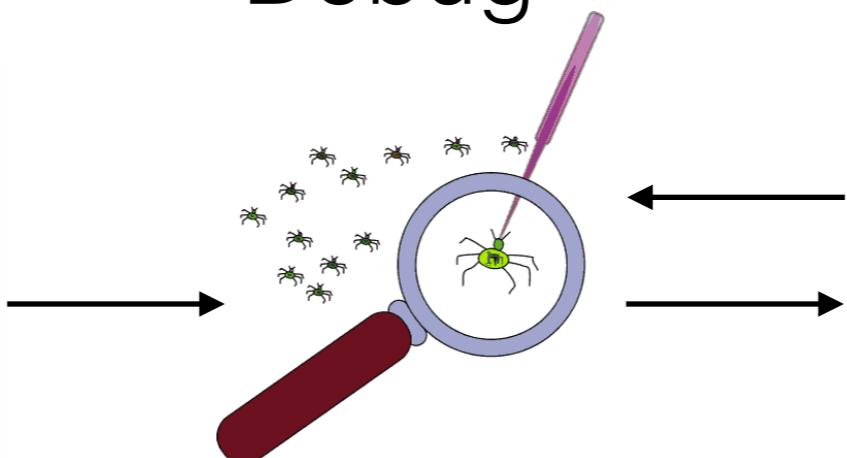
# SurveyMan.org



## Program

Block: Question	Options	ordered	freetext
1 What is your age?	18-25	yes	
1	26-35	yes	
1	36-45	yes	
1	46-65	yes	
1	66+	yes	
1	Yes	no	
1	No	no	
2 Please say both words aloud. Which one would you say?	definitely corvette-licious	yes	
2	probably corvette-licious	yes	
2	probably corvette-licious	yes	
2	definitely corvette-licious	yes	
2	definitely stampede-licious	yes	
2	probably stampede-licious	yes	
2	probably stampede-licious	yes	
2	definitely stampede-licious	yes	
2 Please say both words aloud. Which one would you say?	definitely berlin-licious	yes	
2	probably berlin-licious	yes	
2	probably berlin-licious	yes	
2	definitely berlin-licious	yes	
2 Please say both words aloud. Which one would you say?	definitely typhoon-licious	yes	
2	probably typhoon-licious	yes	
2	probably typhoon-licious	yes	
2	definitely typhoon-licious	yes	

## Debug



## Deploy



## Accurate Results

**Q5 What do you think should happen with Mirror Pond?**

