



Image: Virginia Tech

# Interview research

Kim Nicholas

LUMES

16 November 2022

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**Research Proposal Assignment**  
**Methodologies for Sustainability Science**  
**Fall 2022**

You will demonstrate your knowledge of the research process by independently formulating a research question relevant to sustainability science, acquiring existing quantitative data and analyzing it in Excel to answer the question, and reflect on your methodological approaches.

Your assignment should consist of the following sections:

1. Title
2. Keywords
3. Abstract (250 words max)
4. Introduction (2-3 paragraphs)
5. Research question (1 sentence, ending in a “?”)
6. Research design and Methods
  - a. Case selection and description (1-2 paragraphs)
  - b. Sampling strategy (1 paragraph)
  - c. Data source(s), strengths and weaknesses (1-2 paragraphs)
  - d. Completed operationalization table
  - e. Analytical approach, justifying why you used the methods you did to answer your research question (1-2 paragraphs)
  - f. Own sketch of research design
7. Preliminary finding
  - a. Answer to research question from your analysis (1-2 paragraph)
  - b. Own graphic produced from Excel visually answering research question
8. Preliminary discussion
  - a. Interpretation of mechanisms for findings, broader context (1-2 paragraphs)
9. Relevance to sustainability science/environmental studies (1 paragraph)
10. Audience who could benefit from this research (1 paragraph)
11. Reflection: how did the methods used affect your research design and findings? What research question would you like to investigate next, based on your current finding? How would you collect and analyse primary data using qualitative methods to complement your finding? What ethical considerations would be required, and how would you address them? (max 1 page)
12. References

Assessment Rubric for Research Proposal in LUMES, Lund University  
Kimberly Nicholas, LUCSUS. Email: kimberly.nicholas.academic@gmail.com

	Excellent	Very Good	Good	Adequate	Weak
<p><b>2. Introduction:</b> The research question, variables, and logic and motivation behind the research.</p>	<p>The paper clearly communicates its purpose from the beginning, justifying the importance of the specific research question and linking it to a meaningful real-world context for the author's claims.</p> <p>The Introduction progresses from general to specific, establishing what is known using relevant and reliable peer-reviewed literature, and clearly identifying an important gap that this proposal will fill.</p> <p>The end of the Introduction articulates a clear, reasonable, succinct and novel research question.</p> <p>The independent and dependent variable(s) in the research question are clearly identified, and have been operationalized so that they are clear, unambiguous, observable, measurable, and valid to link with the purpose of the study.</p>	<p>The purpose of the paper is clearly communicated, but misses some opportunities for nuance or subtlety, or else it sets out to explore an ambitious idea whose complexity leads to minor errors in articulation.</p> <p>The introduction suggests some context or stakes for the argument and is supported by appropriate literature but does not offer strong reasoning, or a convincing motive is gestured at but remains implicit.</p> <p>The research question is stated and supported by the literature. Constructs have been identified and variables have been operationally defined.</p>	<p>Either the major claim is clear and arguable but lacks complexity, or else sets out to explore an intriguing idea that has not developed into a specific claim.</p> <p>The introduction either unsuccessfully motivates an unexpected claim or weakly and artificially motivates a claim that does not constitute a significant revision of the status quo.</p> <p>A research question and variables are articulated, but may be slightly confusing or illogical.</p>	<p>The major claim is logical and would require some evidence to support, but the stakes are not as high as they should be. The paper's major claims are somewhat unclear, unspecific or uninteresting.</p> <p>Elements of the research question are poorly formed, ambiguous, or not logically connected to the description of the problem, purpose, or research methods.</p>	<p>The major claim of the paper is weak—vague, simple, or obvious.</p> <p>The introduction usually has no motive. Research question, definitions, assumptions and limitations were omitted or inappropriate given the context, purpose, or methods of the study.</p>

# Plan for today

1. Context: Qualitative research
2. Choosing interviews
3. Designing interview script
4. Coding
5. Example interviews
6. Focus groups
7. Content analysis

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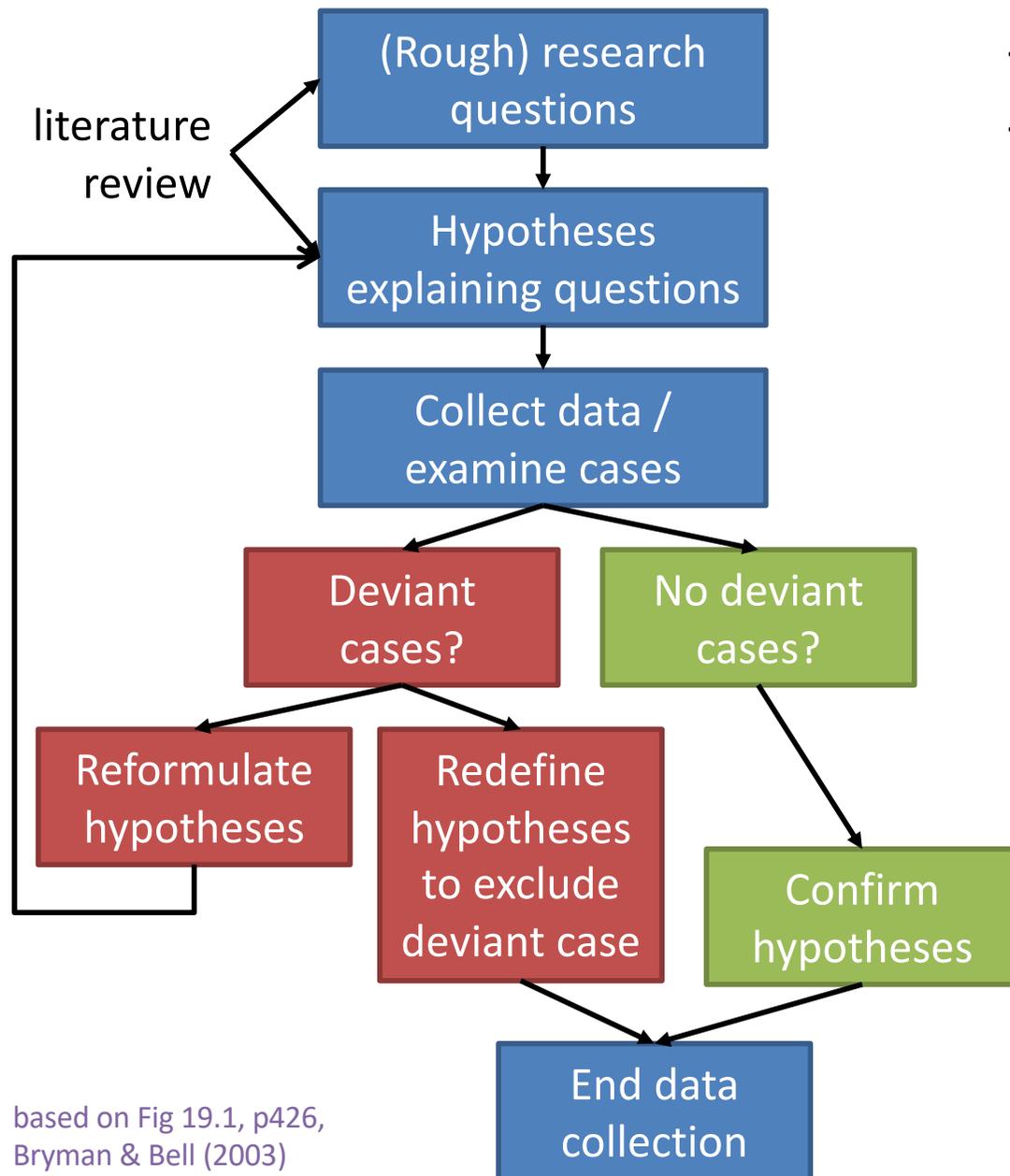
# Qualitative approach (purpose, researcher's role, methods)

- Ethnography: entire culture (participant observation)
- Phenomenology (subjective experiences and interpretation, how the world appears to others)
- Field research
- Grounded theory (derived from observation; coding, memoing, synthesis)

# Qualitative methods

- Participant observation (long-term researcher involvement in context)
- Direct observation (more detached, focused topic; researcher doesn't actively query respondent; can be document-based)
- Unstructured interview (no protocol) (*use only for pilot development!*)
- Case studies (intensive study of specific individual/context)

# Analytic Induction



based on Fig 19.1, p426,  
Bryman & Bell (2003)

# Grounded Theory

theory emerges from data through an iterative, recursive research process

**in practice ...  
balance between  
inductive theorising  
and  
deductive hypothesis  
testing**

# Sampling Design

- Non-probabilistic sampling:
  - driven by research questions (and accessibility)
  - consider representativeness, heterogeneity, extremes, biases
  - sampling methods:
    - convenience
    - snowball (key informants)
    - quota (stratified but not random)
- Theoretical sampling (grounded theory)
  - *“analyst jointly collects, codes & analyses data, and decides what data to collect next and where ... in order to develop theory as it emerges”*  
[Glaser & Strauss 1967: 45]
  - theoretical saturation: data collection stops when theories are clearly established, developed, inter-related ... no new relevant data emerging

**be transparent and clear  
about sampling design,  
justify decisions made**

# Critiques of qualitative research

- subjective, not replicable, not transparent
- not generalisable
- overly descriptive, lacking in analytical rigour
- not governed by theory

**be careful not to  
over-generalise**

**analyse data, don't  
just describe**

**use theory!**

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# Why interview rather than survey?

- Objective: to understand in detail how people think about and experience their lives (not to *represent*)
- Explore contradictions, complexities ... or mundane routines
  - thoroughness, opportunity to go back over same ground
- Avoid forced, pre-defined responses and (implicit) prompting
  - allow for unanticipated responses
- Tailor questions to individual circumstances
  - “*interviewees construct their own accounts of their experiences by describing and explaining them in their own words*”  
[p111, Flowerdew & Martin 2005]
- Learn through dialogue not interrogation
  - “*conversation with a purpose*”  
[Eyres 1988]

# Different Types of Interviews

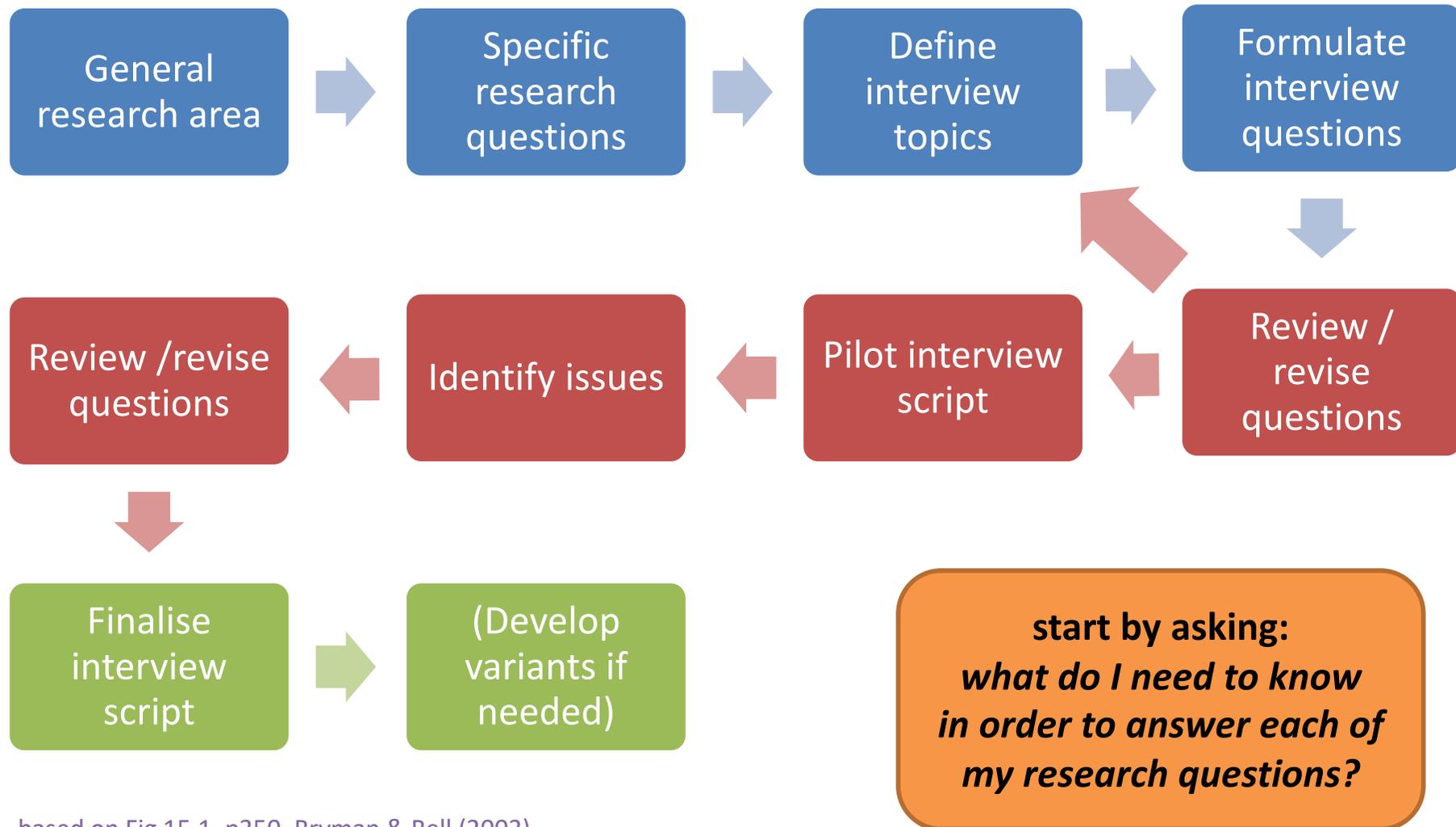
- Structured
  - standardised instrument
  - closed questions
- Semi-structured
  - script with questions on specific topics, may vary for different respondents
  - implemented flexibly (wording, follow-up Qs, order)
- Unstructured
  - general guide of topics / issues
  - open-ended, non-directive (nose-following)

**structured instruments as  
potential complement to  
semi-/unstructured  
interviews**

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# Semi-structured interviews: preparing the script



based on Fig 15.1, p350, Bryman & Bell (2003)

# Writing the interview script

## GENERAL POINTERS

- *Organisation*: general topics in sections, order to ensure flow (be flexible)
- *Questions*: varied, specific but not overly constraining
- *Language*: clear, comprehensible, non-technical, no jargon

## QUESTION TYPES

## EXAMPLES

- **Introducing** *Please tell me about ...*
- **Structuring** *Moving on to a related topic ...*
- **Direct** *Do you find it easy to ...?*
- **Indirect** *How do most people in your field do ... ?*
- **Validating** *I spoke with X who suggested Y ... would you agree ... ?*
- **Directive** *If you were advising X, what changes would you ... ?*
- **Probing** *What do you mean by that?*
- **Specifying** *So, what did you do then?*
- **Silence** [signals for reflection & amplification]
- **Interpreting** *So is it fair to say that ... ?*
- **Leading** *Don't you think that ... ?*

# Different approaches to interview scripts: *e.g., finding out about shopping behaviour*

## Specific questions & potential follow-ups

- Tell me about your household's usual shopping routine.
- Who usually does the food shopping in the household? (*Why? Why doesn't X or Y do the shopping?*)
- Why do you shop there? (*When did you start shopping there?*)
- Do you ever vary the routine? (*How? why?*)
- Tell me about what you normally buy on your regular shopping trips?

## General themes

- Shopping routine
- Who shops / where / why
- Nature of shopping
- Process of shopping
- Shopping routine
- Special occasions

# Setting Up Interviews

## Approaching subjects:

- *polite but personable persistence!*
- phone then letter (or vice versa)
- sell the interview based on *benefits to them* (e.g., outcomes)
- credibility, confidentiality
- fit in with their schedule

**start building  
rapport now ...**

## Phone interviews:

- cheaper, quicker
- less interview attribute bias
- less social desirability bias

## In person interviews:

- supportive rapport
- responsiveness
- pause / reflection time
- observation = information
- (visual aids)

# Conducting an interview

- **Preparation:**
  - research the interviewee & the setting
  - test audio recorder! (& prepare for malfunction)
  - contingency plan (less time, no show, more than one person ... )
- **Introductory statement:**
  - identity, context, supervision, funding, topic, importance
  - reason for selecting respondent, voluntary, confidentiality, anonymity
- **Basic interviewing tips:**
  - active listening! e.g., follow-up Qs, periodically summarise, ask for clarification
  - don't interrupt or argue
- **Wrapping up:**
  - closing question: rapport established, 'doorknob' Q, can be revealing
  - anything you would like to add or ask?

# Criteria for a successful interviewer

- KNOWLEDGEABLE      about subject, about interviewee
- STRUCTURING      purpose, flow, end, any questions
- CLEAR
- GENTLE      let interviewees finish, allow time to think
- SENSITIVE      listen attentively to what interviewees say, and how
- OPEN      respond flexibly to what's important to interviewee
- STEERING      know what you want to find out
- CRITICAL      be prepared to challenge (e.g., inconsistencies)
- REMEMBERING      relate what is being said to what was said earlier
- INTERPRETING      clarifies & extends responses, without imposing

based on Kvale (1996)

# Media interviews are often inappropriate guides for research interviews

- Fact-finding, interrogatory interviewing:
  - [Paxman](#) (as example)
- Revelatory, highly personal interviewing:
  - Herzog (as example)
- Research-oriented, exploratory, even discursive interviewing:
  - [Kermode](#) (as example)

**match interview style and structure  
with research objectives**

# After the Interview

- Immediately after interview:
  - notes, memos, observations, impressions
- Transcribing:
  - time-consuming (4-10 hours per 1 hour interview)
  - be selective
  - upload audio files to computer (simplify controls)
  - trainable voice recognition software
  - take notes as you go (key words, concepts, categories)
  - check once complete
  - (transcribe before translating)

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# Analysing the interview data: *Coding*

- Coding:
  - “*shorthand devices to label, separate, compile and organise data*”
  - ‘append’ to text (word, sentence, paragraph ..), note time or position
- Coding (content analysis):
  - closed, pre-determined, systematic
  - terms, categories, concepts driven by research questions
- Coding (grounded theory):
  - open, emergent, generated by data
    - What is this piece of data about? Of what general category (or topic) is it an instance? What answer (or question) does this piece of data point to?
  - fluid: constantly revised, combined, inter-related as concepts form

# Example of a (Closed) Coding Template

*e.g., Coding Template for research on climate-change related behaviour*

No.	Behavioural context	Codes	No.	Constraints cited	Code
<b>I</b>	Flying	I.1 - I.5	<b>IV</b>	Financial	IV.1 - IV.7
<b>II</b>	Inside home	etc.	<b>V</b>	Habits, routines	etc.
<b>III</b>	Shopping	etc.	<b>VI</b>	Social expectations	etc.

*e.g., Coding Manual for research on climate-change related behaviour*

No.	Behavioural context	No.	Constraints Cited
<b>I</b>	domestic / work (1), abroad / work (2), domestic / leisure (3), abroad / leisure (4), other (5)	<b>IV</b>	deviation from usual expenses (1), opportunity cost (2), other perceived unacceptability (3), insufficient income (4), insufficient savings (5), no available credit (6), other (7)
<b>II</b>	etc.	<b>V</b>	etc.

# Summary: Interview Checklist

## Questions

- does your script have a range of question types?
- are your questions clear, comprehensible, jargon-free?
- are your questions relevant to the interviewees?
- do your questions encourage reflective discussions?
- do your questions avoid imposing your own frame of reference?

## Script

- does your script relate clearly to your research questions?
- does your script allow for unexpected issues to emerge?
- have you included requests for basic personal information?
- have you tested your script?

## Preparation

- do you have a contingency plan? (no audio recorder, less time, no show)
- have you researched your interviewee?
- are you familiar with the interview setting?
- have you tested your audio recorder?
- have you thought about how you want to present yourself?

## Interviewing

- can you introduce your research clearly & succinctly to interviewees?
- how are you going to fulfil the 'criteria of a good interviewer'?

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# Kim's PhD Interviews



Interviews and Participant Observations of Winegrowers in the Sonoma and Napa  
Valleys of California  
Submitted to Stanford University IRB by Kim Nicholas  
May 2005

**1.**  
**Purpose**

**Provide a 3-5 sentence lay summary of the purpose of the study.**

This study aims to understand the environmental, institutional, and social factors that viticulturalists (farmers specializing in growing wine grapes) use to make their crop management decisions. Since wine grapes are an economically important industry in California (valued at \$3.2 billion in 2003), and grapes are highly temperature sensitive, potential future changes in climate may affect continued high-quality winegrowing in the state. This research aims to use interviews and participant observation to learn about how grape growers use environmental information (such as weather and soil temperature monitoring), social information (disseminated through networks of fellow growers), and professional information (from academic or professional consulting sources) to guide their management decisions such as pruning, vine canopy management, grape cluster management, irrigation, pest control, and fertilization.

**What does the Investigator(s) hope to learn from the study?**

While there exists research dealing with the effect of management practices on wine grape yields and quality in controlled experimental settings, there is very little research on how growers actually manage their crop in a natural setting, and what factors influence grower decisionmaking. This research aims to use statistical and experimental approaches to elucidate the relationship between temperature, management, and wine grape quality and yield. One major research outcome will be a better understanding of the factors that contribute to vulnerability of the winegrowing industry to outside shocks like climate change, and potentially to understand factors that contribute resilience in the face of such shocks.

**Describe all study procedures.**

b) This study will use publicly available data on historical climate, current vineyard plantings, and wine quality ratings to statistically explore the relationships between climate regime, grape variety, and wine quality. Potential study participants will be identified based on their location, type of grapes grown, operation size and market target (price per bottle), length of time in the business, and willingness to participate. Participants will be recruited through networking with personal contacts and through grower's organizations and official American Viticultural Areas (AVAs) networks, such as the Napa Sustainable Winegrowers Group and Carneros Quality Alliance.

## 0. Interview setting

1. Setting of the interview	
Their office	(1)
The vineyard	(2)
Other (specify)	(3)
2. Date of the interview	

## 1. Personal Background

<b>History with Wine</b>		
1. Tell me about your family's history of farming.		
Family in any kind of farming	<i>Yes (go on below)</i> <i>No(0)</i>	
If yes, what type of farming?	Table grapes	(1)
	Wine grapes	(2)
	Other farming	(3)
	Animal ranching	(4)
2. Has anyone in your family been involved in winemaking before?	<i>Yes (1)</i> <i>No (0)</i>	
3. Why did you choose a career in farming? What do you like about it? (Code top 3)		
Connection to product/place	(1)	
Craftsmanship	(2)	
Scientific approach	(3)	
Value of rural lifestyle	(4)	
Other	(5)	
4. How did you become interested in wine?		
Consumer	(1)	
Family	(2)	
Other	(3)	
<b>Job Information</b>		
5. Describe what your job duties/responsibilities are. <i>List 1-3 for first, 2<sup>nd</sup>, 3<sup>rd</sup> response given; code for top 3 answers.</i>		
Assistant winemaker	(1)	
Enologist (performs basic wine analyses)	(2)	
Grower-winery/client relations	(3)	
Managing people/overseeing vineyard work	(4)	
Marketing/sales/distribution	(5)	
Setting strategic direction of operation	(6)	
Winemaker (in charge of winemaking)	(7)	
Vineyard design	(8)	
Vineyard manager (oversees vineyard work)	(9)	
Viticulturist (performs vineyard work)	(10)	
Other	(11)	

# CONSENT FORM

## For participation in Stanford University research on decisionmaking in viticulture

**FOR QUESTIONS ABOUT THE STUDY, CONTACT: Kim Nicholas,  
4100 Lovall Valley Loop, Sonoma, CA 95476. Tel: 707-938-8101;  
Cellular: 415-279-2379. E-mail: [kncahill@stanford.edu](mailto:kncahill@stanford.edu)**

**DESCRIPTION:** You are invited to participate in a research study on how grape growers use environmental, social, and professional information, as well as their own instincts, to guide their management decisions in the vineyard. You will be asked questions about the factors influencing your decisions in such operations as pruning, vine canopy management, grape cluster management, irrigation, pest control, and fertilization. Additionally, you will be asked about the sources of information that you use to make your decisions, and the characteristics in the site and grapes that you are trying to achieve. The goal of the study is to understand how vineyard managers make decisions, and how they may respond to future changes.

You will be asked to answer questions, which will be audio recorded if you consent. If you consent below, these tapes may be played to scientific audiences for research purposes if all personal identifying information is removed. Tapes will be archived in a secure location by KN. Copies of your interview tapes will be made available to you if you wish.

You may also be asked to participate in an observational study, where a researcher will unobtrusively accompany you in the vineyard as you go about your daily operations to learn more about your management practices. This is an additional part of the study and is not required for participation in the interview.

**RISKS AND BENEFITS:** The risks associated with this study are anticipated to be minimal, not greater than those experienced in daily life. The benefits which may reasonably be expected to result from this study are an increased understanding of your own management decisionmaking and the factors that influence it through your reflections and participation in the interviews, and from the study analysis of the factors that contribute to wine grape quality, which may inform future management practices. However, we cannot and do not guarantee or promise that you will receive any benefits from this study.

**TIME INVOLVEMENT:** Your participation in this study will take approximately 60-90 minutes.

**PAYMENTS:** Participation is completely voluntary, and you will not receive any monetary compensation for your participation.

**SUBJECT'S RIGHTS:** If you have read this form and have decided to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty. You have the right to refuse to answer particular questions. Your individual privacy will be maintained in all published and written data resulting from the study.

If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact -anonymously-, if you wish - the Administrative Panels Office,

Stanford University, Stanford, CA (USA) 94305-5401 (or by phone (650) 723-2480 - you may call collect).

I give consent to be audiotaped during this study:

Please initial:

\_\_\_\_ Yes

\_\_\_\_ No

I give consent for tapes resulting from this study to be used for presentation at scientific meetings if all identifying information is removed:

Please initial:

\_\_\_\_ Yes

\_\_\_\_ No

**The extra copy of this consent form is for you to keep.**

SIGNATURE \_\_\_\_\_  
DATE \_\_\_\_\_

Thank you very much for your time to participate in this study.

Protocol Approval Date: 5/27/2005  
Protocol Expiration Date: 5/26/2006

Interview questions for winegrowers in Sonoma and Napa

Kim Nicholas

Updated 21 January 2007

- 1) Personal background
  - a) Would you mind sharing your age with me?
  - b) Please tell me how you got into the wine business?
    - 1) (Background, education, in industry, in area?)
  - c) Tell me about your current job. (responsibilities, how long?)
  
- 2) Winegrowing operation
  - a) Varieties, acres of each, where located.
  - b) What are your growing objectives? (Quality?...Price?...Yield?)
  - c) What happens to your fruit? (Estate bottled or sold? Governed by contracts?)
  - d) Are you familiar with the Winkler classification of winegrowing regions by degree-day accumulations?
    - 1) Do you know which Winkler region you are in?
    - 2) How do you measure which Winkler region you're in?
    - 3) Does this affect your pricing?
  
- 3) Perceptions of quality
  - a) How would you describe wine grape quality?
  - b) What do you think are some of the most important factors contributing to wine grape quality?
    - 1) Are these different for different varieties?
  - c) I'm going to ask you to consider various factors that might contribute to wine grape quality and to rate them in terms of their importance to contributing to quality, and explain to me why you made the choices you did. (Administer Questionnaires 1-5. Probe reasons for selection of top 3 factors. If weather is included, probe which aspects of weather affect quality- at what time in the season? What effects? What conditions are favorable to quality? For annual management factors, ask why top 3 factors are important, and what they do in their management with these factors.)
  - d) What do you think about wine rating scores? (Do they reflect your opinion of quality?)
  - e) What areas are suitable for growing high-quality (variety)? [consider having a map to draw areas on]
  - f) In areas where quality is now poor for (variety) (e.g., Central Valley), what could be done to improve it?
    - 1) (What would work/be technically possible vs. what is reasonable/worthwhile)?
  
- 4) Response to stresses
  - a) What do you think are the biggest challenges facing your operation over the next few years? Over the next few decades? Anything different for the industry as a whole?
  - b) How do you deal with frost in the vineyard? (overhead sprinklers, wind machines, etc.)
    - 1) How long have you used (*this response strategy*)?
    - 2) How did you first hear about (*this response strategy*)?
    - 3) What frost protection were you using before (*this response strategy*)?
    - 4) What motivated you to switch to *this response strategy*?
  - c) Have you worked in vineyards affected by phylloxera?
    - 1) How did you respond to the phylloxera?

**Yellow cards- establishing a vineyard**

	Rank 1-7
1. Clone/selection	
2. Rootstock	
3. Row direction	
4. Soil amendments	
5. Trellising	
6. Variety	
7. Vine/row spacing	
8. Other	

**Orange cards- annual vineyard management**

	Rank 1-13
1. Cluster thinning	
2. Cover cropping	
3. Disease/pest control	
4. Harvest date	
5. Irrigation	
6. Leafing	
7. Nutrition	
8. Pruning	
9. Shoot thinning	
10. Soil management	
11. Suckering	
12. Vine crop load/balance	



**LUCSUS**

CENTRE FOR SUSTAINABILITY STUDIES

# **Interview Guide**

## **Suitability & Feasibility of interventions to reduce car-use in Lund**

Paula Kuss

Master's Program in Environmental Studies and Sustainability Science

Supervisor: Kimberly Nicholas

# Interview Procedure

## Question for each

## Intervention

- Has this been done in Lund before?
- Do you think this intervention would be suitable to reduce car use in Lund?
- Do you think it is realistic to implement the intervention near-term and with the available resources?

Type of Intervention	Intervention
Charging / Pricing	1) Congestion Charge
	2) Workplace Parking Charge
Access Limitations	3) Limited Traffic Zone
Parking & Traffic Control	4) Parking + Traffic Control Intervention Mix
Mobility Services	5) Mobility Services for Commuters
	6) Mobility Services for University
Car-Sharing	7) Integrated Car-Sharing Action Plan
Travel Planning (TP)	8) Workplace TP Intervention Mix
	9) School TP Intervention Mix
	10) University TP Intervention Mix
	11) Personalised TP Intervention Mix
Gamification	12) App for Sustainable Mobility Competition

# 1) Congestion Charge

Intervention	Intervention Type	Measures	Where it was effective?
<b>Congestion Charge</b>	Charging / Pricing	<ul style="list-style-type: none"><li>• Charges for cars within specific zone of the city</li><li>• Revenues often used for infrastructure investments</li></ul>	Stockholm, Gothenburg, London, Milan

Has this been done in Lund before?

Do you think this intervention would be suitable to reduce car use in Lund?

Do you think it is realistic to implement the intervention near-term and with the available resources?