# www.pkdas.in



#### PRADEEP KUMAR DAS

(Professor of Linguistics at Centre for Linguistics, JNU, New Delhi)

(Associate Professor of Linguistics, ON LIEN from the University of Delhi)

#### General Information

About me

My Education

My Teachers

Research Interests

PhD Thesis

**Publications** 

Research Papers for comments

Work in Progress

**Important Links** 

Resume: PDF

IPA-Chart (.pdf)

**Greenberg's Universals** 

Data Template for Field-Methods

Why should we study Linguistics?

Language Families at a glance

Design Features (Hockett 1960)

C.S.Pierce's Classification of Sign

#### Career @ DU & HUFS

**Courses Taught** 

Field-Methods

Historical Linguistics 2011-12

IDC (L-10: Lang & Ling-I)-2013

IDC (L-35: Lang & Ling-II)-2013

Phonology (for short duration)

Research Methodology

Language Typology 2012

Morphology-2012

Language and Mind (08, 12)

Classes @ GRS

Field Work(s)

Work @ HUFS, South Korea

**Hindi Dictionary Online** 

Type Hindi Online

#### Career @ JNU

Classes @ JNU (2005)

My proposed courses in JNU would be:

Any two for MA and LE 630 for MPhil (Monsoon 2013)

LE 482L: South Asia as a Linguistic Area

LE414L: Historical & Comparative Linguistics

LE411L: Morphological and Syntactic Analysis

LE448L: Language Typology

LE630 : Structure of Lesser Known Languages

#### Contact me



A linguist must put in words, Words as 'WORDS'. M. Heidegger

### What is research?

The term 'Research' consists of two words:

Research = Re + Search

'Re-' means again and again and 'Search' means to find out something new through the following processes:

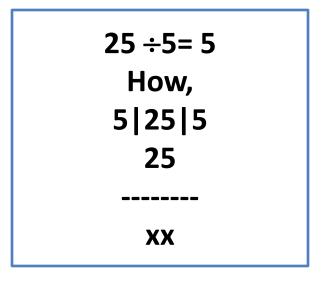


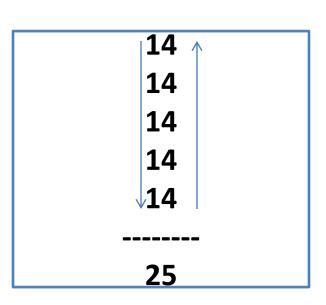
Therefore, research means that we observe the phenomena again and again from different dimensions.

There are many theories of learning and they are there precisely because of the observation from different dimensions.

The research is a process in which a person observes the phenomena again and again and collects the data and on the basis of data s/he draws some conclusions.

# A new attempt





# Pattern congruity

```
1 x 8 + 1 = 9

12 x 8 + 2 = 98

123 x 8 + 3 = 987

1234 x 8 + 4 = 9876

12345 x 8 + 5 = 987 65

123456 x 8 + 6 = 987654

1234567 x 8 + 7 = 9876543

12345678 x 8 + 8 = 98765432

123456789 x 8 + 9 = 987654321
```

```
1 x 9 + 2 = 11

12 x 9 + 3 = 111

123 x 9 + 4 = 1111

1234 x 9 + 5 = 11111

12345 x 9 + 6 = 111111

123456 x 9 + 7 = 11111111

1234567 x 9 + 8 = 111111111

12345678 x 9 + 9 = 1111111111

123456789 x 9 + 10 = 1111111111
```

```
1 x 1 = 1

11 x 11 = 121

111 x 111 = 12321

1111 x 1111 = 1234321

11111 x 11111 = 123454321

111111 x 111111 = 12345654321

1111111 x 1111111 = 1234567654321

11111111 x 11111111 = 123456787654321

111111111 x 111111111 = 12345678987654321
```

#### **GENERAL CHARACTERISTICS OF RESEARCH**

- The following characteristics may be gathered from different definitions of 'Research'
- 1. It brings new knowledge or data from primary or first-hand sources
- 2. It puts emphasis on the discovery of general principles.
- 3. It provides an example of a systematic and accurate investigation.
- 4. It uses certain valid data gathering devices.
- 5.It is logical and objective.
- 6.The researcher should resist the temptation to seek only the data that support his/her hypotheses.
- 7.The researcher thus should eliminate his/her personal feelings and preferences.

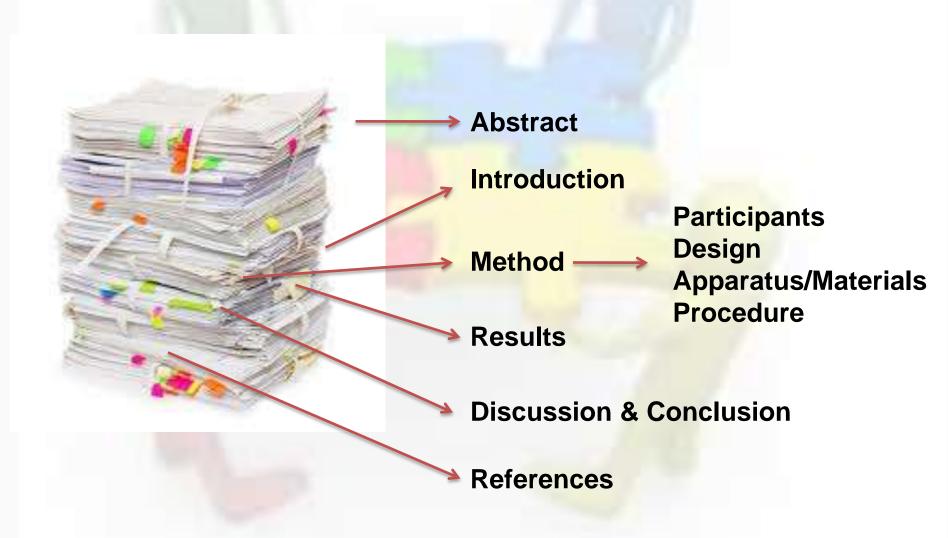
# Procedures of carrying out a research

- 1. Define the problem (chose a topic)
- 2. Gather the necessary information (initial survey)
- 3. Organize the information (observations of the facts and building of some hypotheses)
- Analyse the information by collecting more (large) sample of the object under investigation
- 5. Test you initial hypotheses and if they work, go ahead and theorize about your findings
- 6. If the hypotheses do not work, go back to the stage of initial stage of data collection
- 7. Collect some other sample and re-do the whole procedure
- 8. After you succeed in the above stated attempt, you can finalize the research and
- 9. Write the report

# **Essential components of a Report**

- Cover Page
  - Title Page
- Letter of Transmittal
  - Table of Contents
  - List of Illustrations
  - Executive Summary
    - Body of the report
      - Analysis
      - Conclusion
        - Reference
          - Appendix

## Structure of the report



# Structure(in a sense Meta-)

Body of the report

—Introduction: What are we talking about?

– Method: How did we measure?

– Results: What did we measure?

– Discussion: What does it mean?

– Conclusions: What should be remembered?

– References: Whose work was referred to?

– Appendices: Extra information

## **Title**

- Short
- Accurate
- Informative
- Include key-words
  - Allow search engines to find the article
- No abbreviations

10

### **Abstract**

- Summary of work
- 100-150 for an article, 300-500 words for a report, and 500-800 for a thesis
- It is better to re-written several times
- All information should be covered in the body of the report
- Should be self-contained: meaning whatever you put as a summary should not have any reference
- No abbreviations
- 1-2 sentences for each of the 5 main parts
   (introduction, method, results, discussion, conclusions)
   should be put in the summary and then streamline the information
- It should be 'high information content' write-up

### Introduction

- The introduction is another very important aspect of our work, and thus we should avoid making it too long
- It provides background information
- It also helps to create the interest
- It also introduces each and every new idea and the concept.
- So, it is better to write or at least rewrite it at the end
- It also places the work in a continuum i.e. a context
- It also links the work with other existing research work(s) and it paves the path of future research
- It also helps to define scope and purpose of the work.
- It also introduces what problem(s) are we trying to solve?
- Or at least what question(s) are we trying to answer?

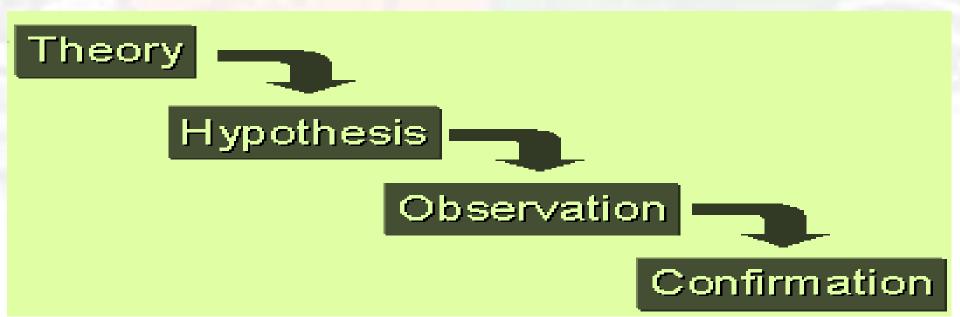
## Method

- What method(s) did we use to address our problem(s)?
- The method must allow us to evaluate the results
- It allows us for the verification of the results
- It also describes evaluation procedure
- In this section, we mention all settings, controls, variables, processing etc.
- By mentioning the main line of thinking and mentioning the method(s), the researchers can assume basic knowledge of the field
- The method section of the report describes what has actually been done, and NOT what should have been done
- Usually two kinds of methods are discussed in the literature for any research work and they are know as 'Inductive and Deductive methods'

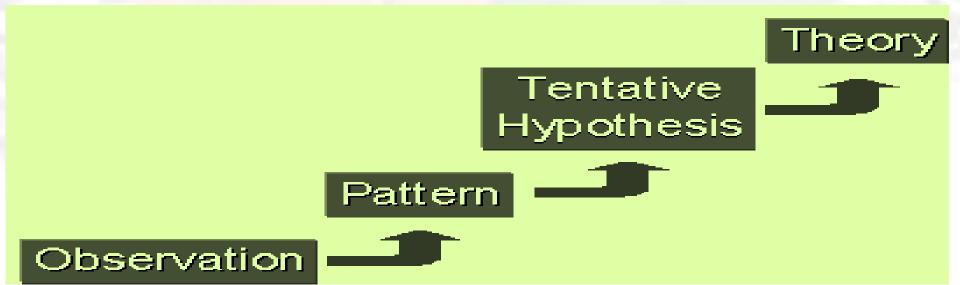
### Inductive Vs. deductive

- These two methods of reasoning have a very different "feel" when we are out there to conduct the research by imbibing either of these methods
- Inductive reasoning, by its very nature, is more open-ended and exploratory, especially at the beginning
- Deductive reasoning is more narrow in nature and is concerned with testing or confirming of some predefined and determined hypotheses
- Even though a particular study may look like that it is purely deductive, most of the social science researches and researchers involve both inductive and deductive reasoning processes at some point of time in doing their research work
- However, let us make a clear distinction here and see how these notions work in carrying out the research in social sciences or even in pure sciences

- Deductive reasoning works from the more general to the more specific.
- Sometimes this is informally called a "top-down" approach.
- We might begin with thinking of a theory about our topic of interest.
- We then narrow that down into more specific *hypotheses* that we can test.
- We narrow down even further when we note-down the *observations* to address/ check the hypotheses.
- This ultimately leads us to be able to test the hypotheses with specific data -- a confirmation (or not) of our original theory.



- Inductive reasoning works the other way round, i.e. moving from specific observations to broader generalizations and theories.
- Informally, we sometimes call this a "bottom up" approach (please note that it's "bottom up" and *not* "bottoms up")
- In inductive reasoning, we begin with specific observations and measures.
- Then we move over to detect patterns and regularities, formulate some tentative hypotheses that we can explore, and finally end up developing some general conclusions or theories.



## Discussion

- In the discussion section of the report, the researcher mentions his opinions about the subject matter, and makes his claims stronger by giving references of other's opinion on the issue.
- This section can show what new things were learned from the experiments/data
- In some rare cases, we can also say in the discussion that despite the best effort no new results have been achieved and this is not a demerit of the work.
- It simply strengthens the work of the earlier researcher, but even the present researcher gets the credit for his/her hard work
- We can conclude by saying, 'What is the relevance of the present results and what did we learn?

We also have an option to mention the things which are not readily observable from the available data in this section. This will pave the ways for other research work with some different objectives in the same area. For example:

1.	rəhim-ne	səmira-ko	yad	kıya
	Rahim-3MS-Erg	Sameera-3FS-Acc	remembrance-N.f	do-pst-3MS
	'Rahim remembered Sameera'.			
			_	
1a.	rəhim-ko	səmira-ki	yad	ay-I
1a.	rəhim-ko Rahim-3MS-Dat	<b>səmira-ki</b> Sameera-3FS-Gen	yad remembrance-N.f	<b>ay-I</b> do-pst-3MS

There is a problem of agreement between the noun and verb in the above two representative sentences.

I noticed this while doing the research for my PhD which has examined the 'agreement-pattern' in about 15 Indian languages. We did not have the solution for the set and reported this as a

topic for further research.

I found the solution for it after four years and got it published in one of the journals in South Korea.

## Conclusion and further directions

- Conclusion is the place where we have to be very precise and conclude the research with findings in bullet points.
- For the report-writing the bullet points are the best, but in case of a thesis, it can short and well-thought out paragraphs
- It is not the summarization of the thesis/report. I have seen many reports/theses where researchers summarize what they have done in all the chapters.
- It should consists of what you want the readers to remember about your work?
- The conclusion should be self-contained and it should have no references
- For reports it should typically be of 2-3 paragraphs but in case of thesis it can be of 2-3 pages.

# Acknowledgements

- If the research work is an academic paper or report, the acknowledgement can be put after the conclusion.
- However, if it a thesis, the acknowledgement is put before the table of contents.
- We must thank all who have overtly/covertly contributed to the work
- We must thank the sponsoring organization(s), if applicable
- We must thank an external reviewer, if applicable
- We usually do not thank relatives or friends in report, academic paper, but one can do that in case of a thesis

# References/Bibliography

- A Bibliography is any list of references at the end of a text, whether cited or not.
- 'References' usually come at the end of a text (thesis or research report) and should contain only those works cited within the text.
- All statements, ideas, figures, tables of others should be referenced
- We should cite current and recent publications
- This will show that we know what are the recent developments in the field
- In report and academic papers, we should put only those references that we have actually read
- For style-sheet, we can use 'The Chicago Manual of Style'

## References

We should be clear enough for the reader to locate it We should mention about: author name(s), title, publishing agency in any adopted format but in uniform way

#### Format:

```
Publisher and city (for books)
```

Journal name volume and page(s) (for articles)

Conference name, date, and location, and page in the proceedings (for conference papers)

Department and University (for theses)

**URL** (for Web pages)

Follow any good available format with 100% uniformity

### Things to bother:

- Book
- One author
- Two or more authors
- Editor, translator, or compiler instead of author
- Editor, translator, or compiler in addition to author
- Chapter or other part of a book
- Chapter of an edited volume
- Book published electronically

- Journal article
- Article in a print journal
- Article in an online journal
- Article in a newspaper or popular magazine
- Book review
- Thesis or dissertation
- Paper presented at a meeting or conference
- Website
- Blog entry or comment
- E-mail or text message
- Item in a commercial database

# **Appendices**

- Additional material that is only meant for technical reading
  - E.g.: mathematical proofs, raw results, circuit diagrams,
     ...
- Non-essential to comprehension
- Further clarify report
- Each appendix should contain different data/information
- Appendices should be referred to in the text
  - Thank you, that's all ©