

**SPEECH & LANGUAGE REHABILITATION FOR
HEARING IMPAIRED
SPAU 339**

Mu'tasem Khalaf
M.A., Speech Language Pathologist (C, CCC-SLP)
2018



Introduction

Aural Rehabilitation

Aural Rehabilitation: is intervention aimed at minimizing and alleviating the communication difficulties associated with hearing loss. (usually adults)

Rehabilitation: means to restore something that was lost.

Rehabilitation services designed to help individuals to overcome the challenges posed by a disability. (How?)

- by **providing** an individual with the most **appropriate technological support**
- and then to help person **build skill levels** in functioning (not overwhelming)

Aural rehabilitation is designed to:

- provide appropriate technical support (HAs, CI, FM sys.,...)
- and then develop the individual's skill levels step-by-step

“CI —> sound detection —> identification —> discourse comprehension”

Aural Habilitation: is intervention for persons who have not developed listening, speech, and language skills (usually child)

Aural Rehabilitation Goals

- To alleviate (reduce) the difficulties related to hearing loss.
- To minimize its consequences.
- ✦ Aural rehabilitation may include: diagnosis, quantification of the HL, and the provision of appropriate listening device

For Adults:

- communication strategies training
- counselling related to HL
- vocational counselling
- noise protection
- family members counselling and instructions
- speech perception training, (e.g., speechreading training “Less common”)



For child:

- diagnostics
- provision of appropriate amplification
- speech perception and communication strategies training + intervention related to speech, language, and academic achievement
- family member services



Aural Rehabilitation Settings

- A university speech and hearing clinic
- An audiology private practice
- A hearing-aid dealer private practice
- A hospital speech and hearing clinic
- A community centre or nursing home
- A school
- An otolaryngologist's office
- A SLP's office
- Consumer organization meeting

Who provides Aural Rehabilitation?

- An audiologist (developing plan, coordination b/n pro.)
- A SLP (lead role for a child)
- A teacher for the hard- of- hearing and deaf

Hearing Loss and Prevalence

★ HL categorized along three dimensions:

1- Degree/severity (mild, moderate, m to s, severe, or profound)

From mild, moderate, moderate to severe (b/n 26 and 70 dB) —> **Hard of Hearing**

Severe or profound HL (+70 dB) —> **Deaf**

2- Onset (prelingual HL, perilingual HL, or postlingual HL)

3- Time course (progressive HL vs. sudden HL)

- ✿ **Audiologic rehabilitation:** is a term often used synonymously with aural rehab. or aural hab.; may entail greater emphasis on the provision and follow up of listening devices and less emphasis on com. strategy and speech perception training.
- ✿ **Hard of hearing:** means having a HL; usually not used to refer to a profound HL.
- ✿ **Deaf:** having minimal or no hearing
- ✿ **Prelingual** refers to a hearing loss acquired *before* the acquisition of spoken language
- ✿ **Perilingual** refers to a hearing loss acquired *during* the stage of acquiring spoken language.
- ✿ **Postlingual** refers to a hearing loss incurred *after* the acquisition of spoken language.

- ✦ **A progressive hearing loss** is a hearing loss that increases over time.
- ✦ **A sudden hearing loss** is a hearing loss that has an acute and rapid onset.

Relevance of Aural Rehabilitation

✿ Aural Rehab. is relevant for two general reasons:

1- **Demographics** (older persons, infants and children, adults, unserved and underserved)

2- **Cost-effectiveness**

✿ An **unserved** population refers to a group of pts. in need of but not receiving services.

- because of: policy, practice, and/or environmental barriers

✿ An **underserved** population is a group of pts. receiving less than ideal services.

- because of:

- reduced of immediate or extended supportive services

- service delivery personnel attitude

- the lack of reimbursement policies for aural rehab.

- communication and environmental barriers



Communication Strategies and Conversational Styles

✿ Communication training

(communication strategies, auditory training, speechreading training) collectively

- Not proffered universally
- Provided in cursory fashion (سطحي)

Is: instruction provided to a person with a HL to maximize his/her communication potential.

✿ Successful communication variables:

- Effectiveness of the listening device
- Lipreading skills
- Amount of residual hearing
- How well people use communication strategies

✿ Communication strategy

Is: a course of action taken: (to enhance comm.)

- to facilitate a conversational interaction

- or to rectify (نتدارك) a problem that arise during conv.

✿ During comm. strategies training, pts. receive instructions about how to manage their conv. interaction effectively.

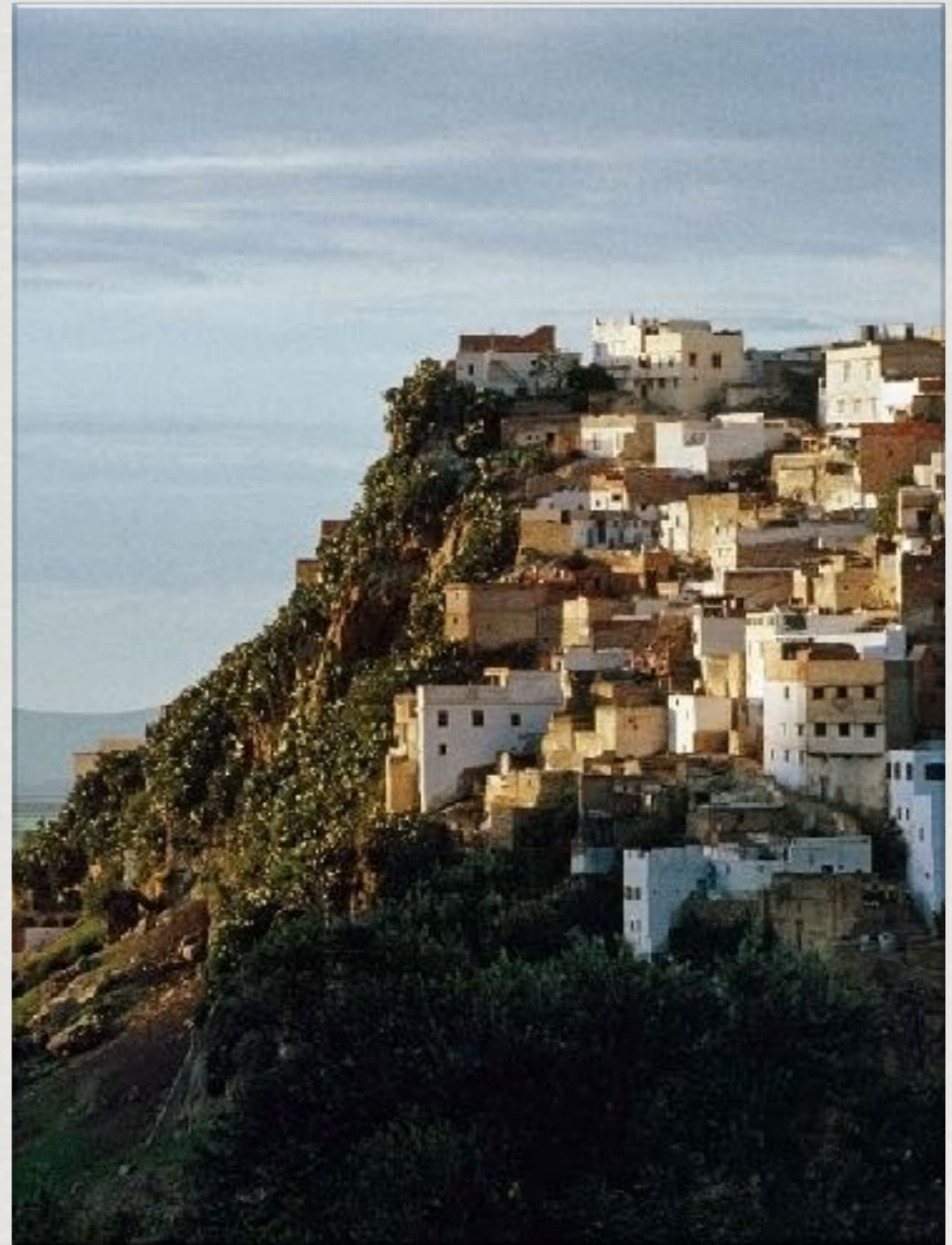
Conversation

- ✦ **What** we say, **how** we say it, and **how** we listen
- ✦ Reasons for conversation:
 - To share ideas
 - To relate/exchange experience
 - To express needs/ideas
 - To tell stories
 - To effect a result
 - To instruct
 - To influence
 - To intimacy (نتألف، نتقرب)

- ✦ The way we talk with others is guided by our knowledge of the rules of conversation
- ✦ **Conversational rules** are implicit (ضمنية) rules that guide the conduct of participants in a conversation.
- ✦ When begin a conversation, usually people:
 - Agree to **share interests**
 - Ensure that **no single person** does all of the **talking**
 - **Participate** in choosing **what to talk about**, and participate in **developing the topic**.
 - **Take turns** in orderly fashion.
 - Try to be **relevant to the topic** of conversation.
 - **Provide enough info.** to convey a message without being verbose
(مبهم)

- ✿ HL conversation —> some rules have to be *modified or adapted*
- ✿ frequent clarification **leads to** frequent interruptions
- ✿ Conversations involving HL person may have one of the following characteristics:
 - Disrupting taking of turns
 - Modified speaking style
 - Inappropriate topic shift
 - Superficial content
 - Frequent clarification

Classes of Communication Strategies



✦ Persons with HL may use two kinds of communication strategies during the course of conversation. Why?

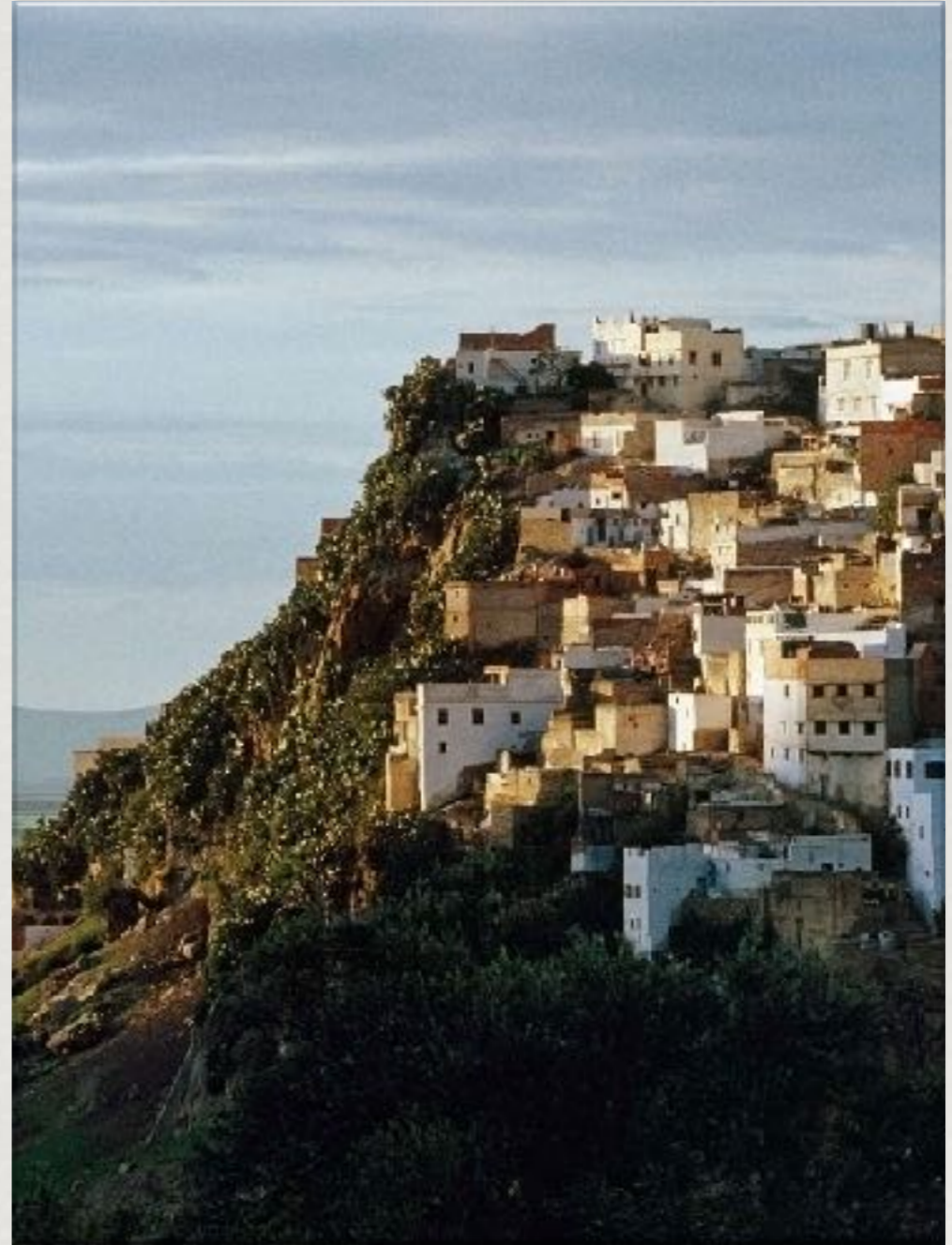
- To minimize or prevent comm. difficulties
- To facilitate and repair

1- **Facilitative strategies**: include instructing the talker and structuring the listening environment, to enhance the listener's performance

2- **Repair strategies**: is a tactic used by an individual when he/she has not understood a message.

* **Communication breakdown** occurs when one comm. partner does not recognize another's message.

Factors That
Influence Reception
Of Spoken Message

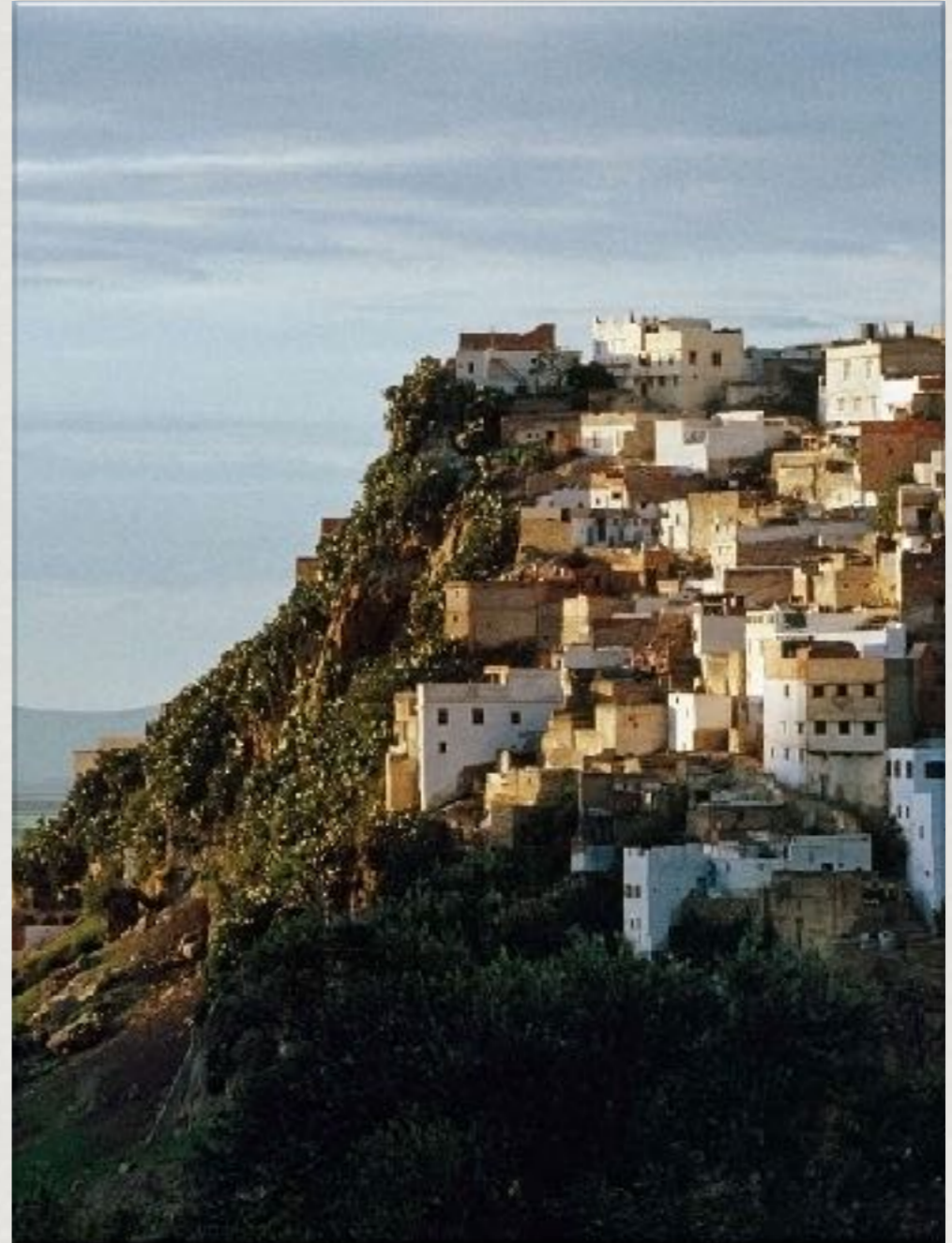


Factors That Influence Reception Of Spoken Message

✦ **Four** factors:

- 1) The Talker (spoke quickly, blurred together word boundaries, and omitted word's component sounds) + chewing gum, or cover face by hand
 - 2) The Message (complexity, length, ambiguity, keyword repetition, no colloquialisms العامية)
 - 3) Environment (quiet, well-lit, good distance, no visual distractions, good viewing angle)
 - 4) The Patient (good speechreading, severity, vision capabilities, concentration, self-defeating emotional state)
- ✦ Facilitative strategies are used to influence these four factors

Facilitative Communication Strategies



- Communication partner (**the talker**)

Instructional strategies: ask the partner to speak clearly, facing forward

*In an instructional strategy, the listener asks the talker to change the delivery of the message.

- Hard-of-hearing should: identify —> instruct

- **Message**

Massege-tailoring strategies: encourage the partner to use short sentence or controlling the topic of conversation.

Massege-tailoring strategy: phrasing one's remarks to constrain the responses of a communication partner.

- “Did you go swimming or biking last night?” vs.
“What did you do last night?”

Not only what to say **but** how to say it?

Communication **Environment**

Constructive strategies: minimizing background noise, ensure a favourable view of the talker

* Constructive strategy: a tactic designed to optimize the listening environment for communication.

✦ Maladaptive strategy: an **inappropriate** behavioural mechanism for coping with the difficulties caused by HL in a conversation.

Examples of Constructive Strategies

Table 2-2. Examples of constructive strategies that can be used to optimize the listening and speechreading task. This list might be provided to the person who has hearing loss.

- If possible, ensure that the talker is well-lit so that you watch the talker's face.
- If the talker is far away, move closer.
- If background noise is present, try to either reduce the noise or move to a quieter setting.
- Try to avoid rooms or auditoriums that have sound reverberation. You might request that a meeting be held in a room with good acoustics; typically, a room that has carpet, draperies, and minimal noise from air conditioners and radiators.
- Arrive early so that you can get favorable seating, near the talker.
- Eliminate visual distracters, such as a curtain flapping in an open window.

✦ Facilitative strategies(FS) may be used to influence:

- Patient's speech recognition skills (**the listener**)

Adaptive strategies: relaxation techniques

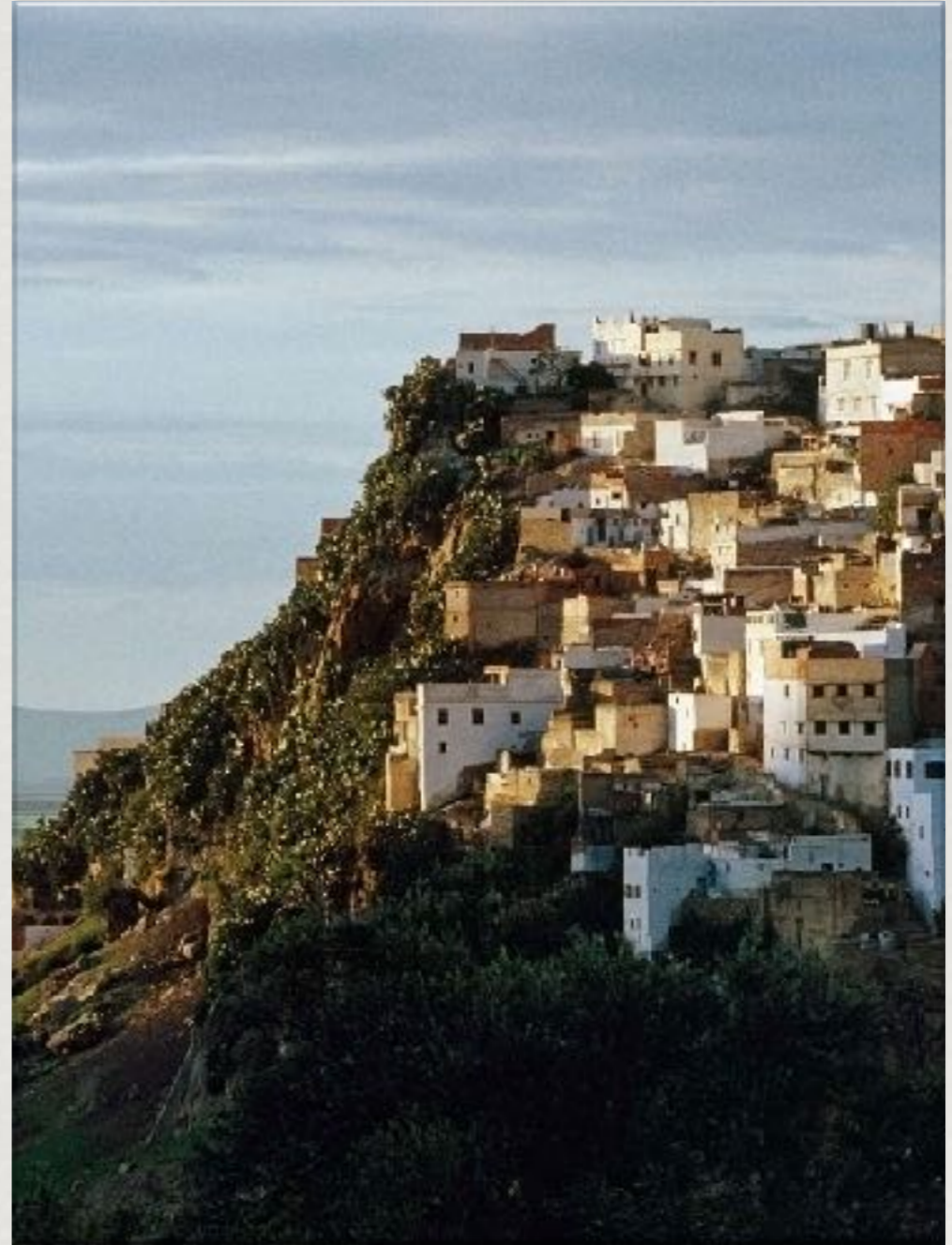
Attending strategies: attention to situational, linguistic, and facial cues for inferring (استنتاج) partially recognized messages.

*Adaptive and attending strategies: methods of **counteracting** maladaptive behaviors that stem from HL.

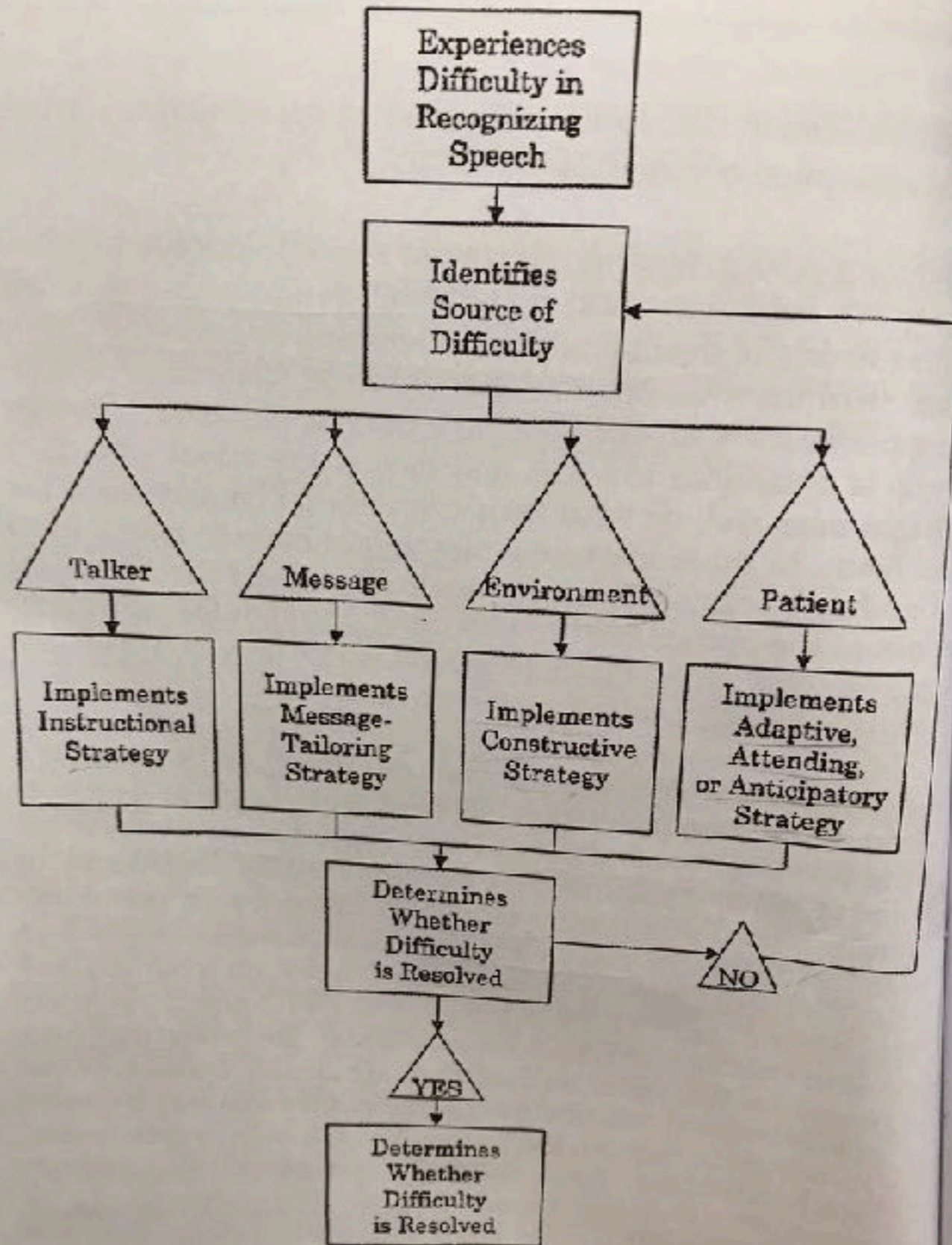
Anticipatory strategies: advanced preparation on content and potential listening difficulties.

*Anticipatory strategies: are methods of preparing for a communication interaction.

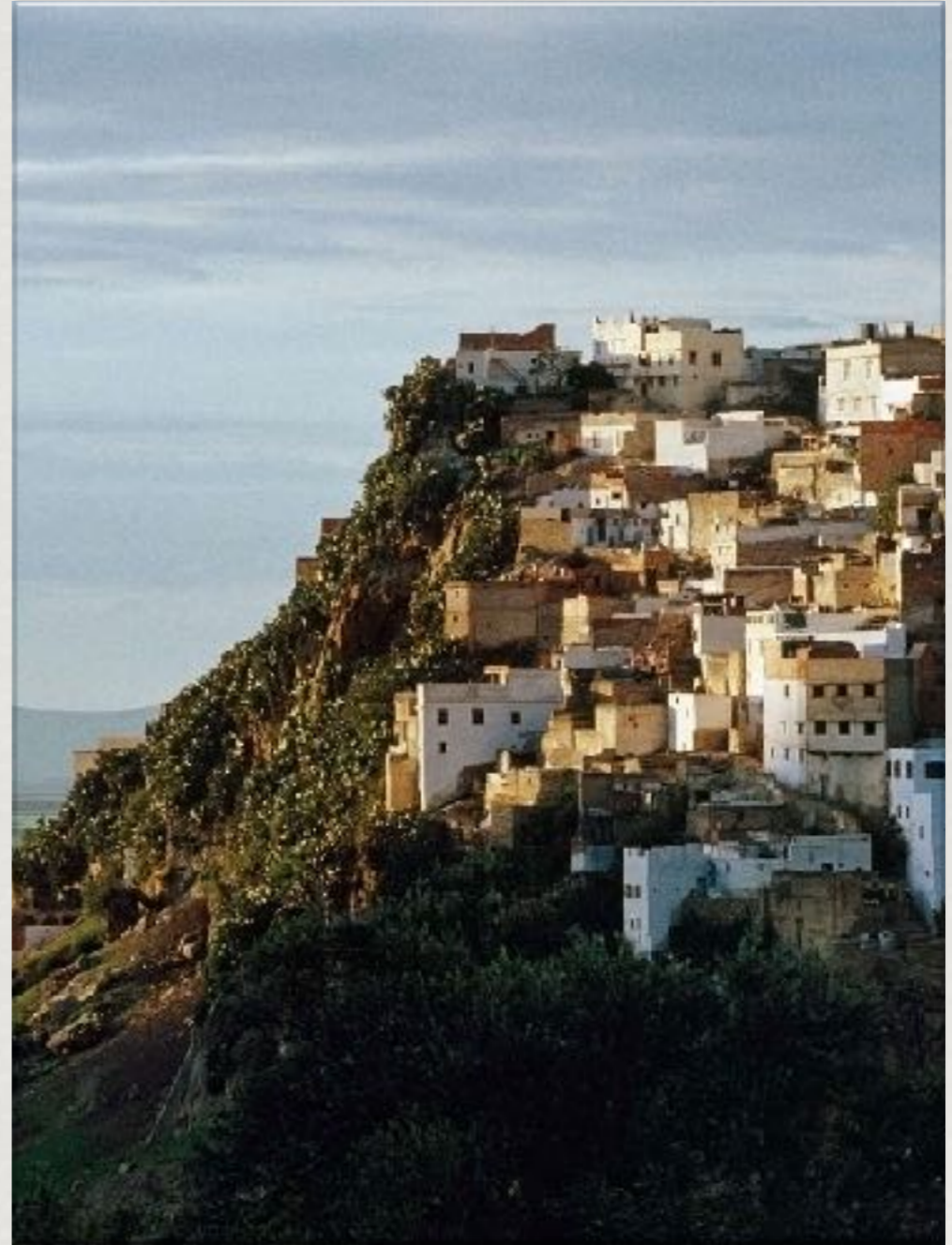
Resolve Difficulties in
Speech Recognition
By Using Facilitative
Strategies



- ◆ HI person: *Identifies* the source of difficulty —> *implements* FS —> *determines* whether the difficulty is resolved.
- ◆ If yes —> conversation continued.
- ◆ If not —> implement another strategy.



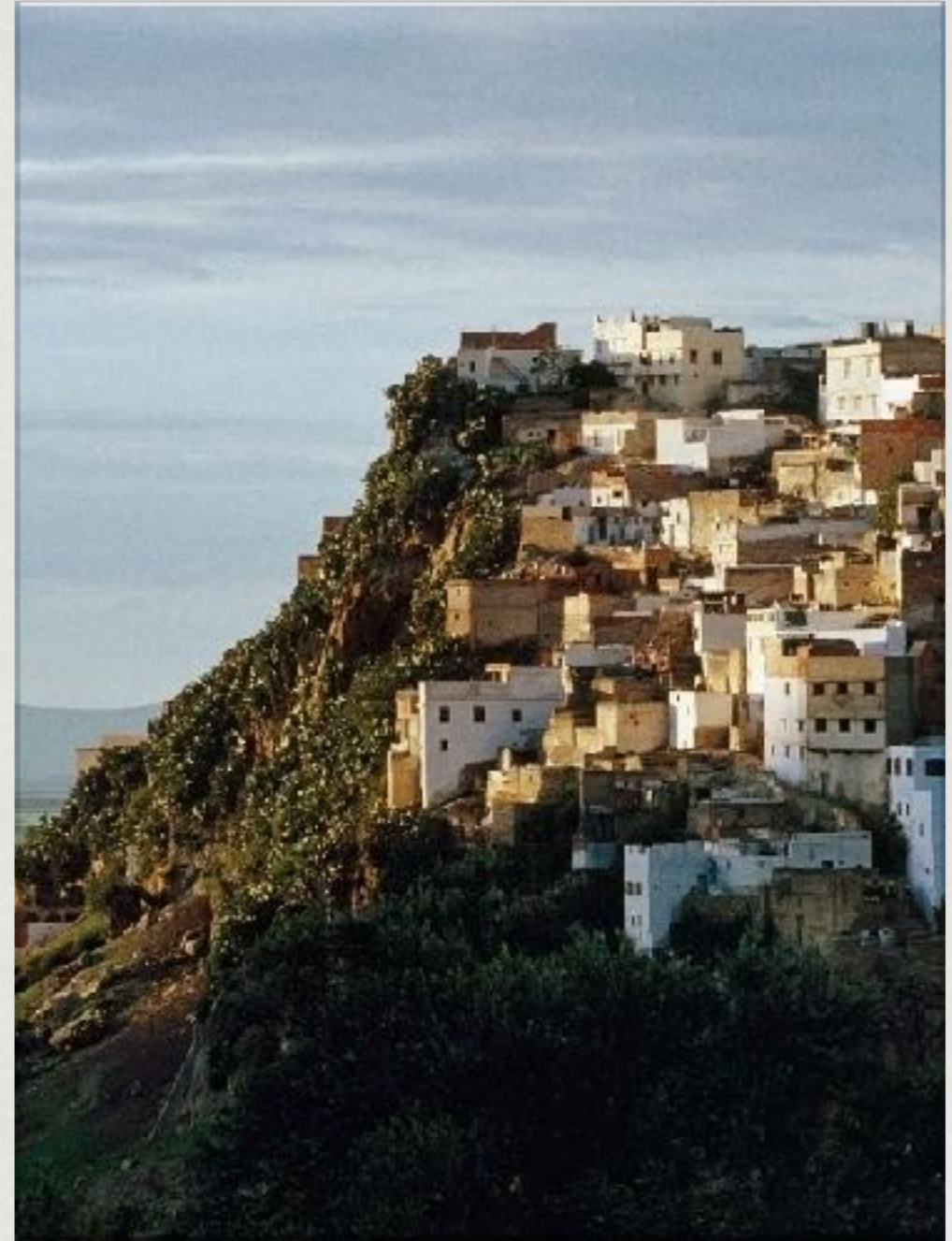
Repair Strategies



Repair Strategies

- ✦ when communication breakdown happened —> request for something via repair strategies (to rectify a comm. breakdown)
 - ✦ **Receptive repair strategy**: a tactic used by a listener when message presented by a comm. partner is not understood.
 - ✦ Examples of repair strategies:
 - “Could you say that again” (repeat)
 - “Who is going to give you a ride” (request for info.)
 - “I missed that completely, what are you talking about?” (key word)
 - asking for more info. “ tell me more, I didn’t catch it” (elaborate)
- (repeat all or part, rephrase, elaborate, simplify, indicate the topic of conversation, confirm, write, fingerspill **the message**) (What, Huh, Pardon)

Stages in Repairing A Communication Breakdown



Stages in Repairing A Communication Breakdown

- ✦ 3 stages in repairing communication breakdown:

First: **Detect breakdown** (Hard of Hearing or Comm. partner)

- Detection could be *early* at onset of breakdown or *later*

Second: Initiate **repair** of the break down (Hard of Hearing or Comm. partner)

- using repair strategies vs. bluffs
- breakdown could be resolved using a **repair** strategy or **extended repair** are needed

✦ **Extended repair:** when many repair strategies are needed to resolve a communication breakdown.

✦ When using repair strategies, sometimes the topic of conversation can shift (by not using the proper repair strategy)

Third: The **result** (successful repair —> conv. carries on)

(repair is not success —> repair process cont.)

✿ Bluffing: when pts. pretend to understand following a communication breakdown, nodding and smiling in agreement with what they don't know.

✿ Continued bluffing will lead to the feeling like a failure or angry at himself/herself.

✿ Two reasons for **bluffing** *extensively*:

1- reluctance to acknowledge/admit HL (vanity, social stigmata)

2- spirit of cooperation (frequent halting/clarification —> less pleasant and rewarding conv.)

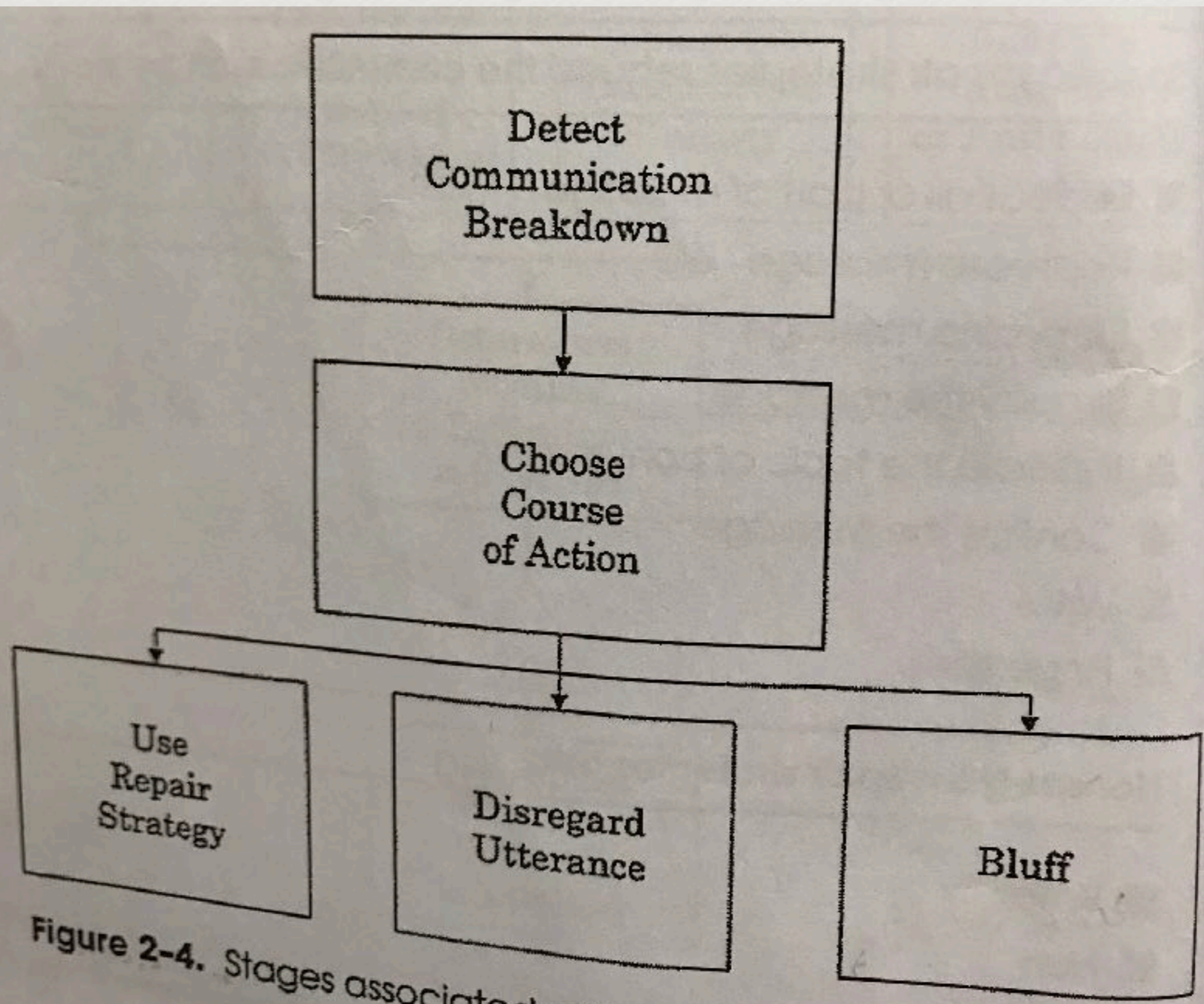


Figure 2-4. Stages associated with communication breakdown.

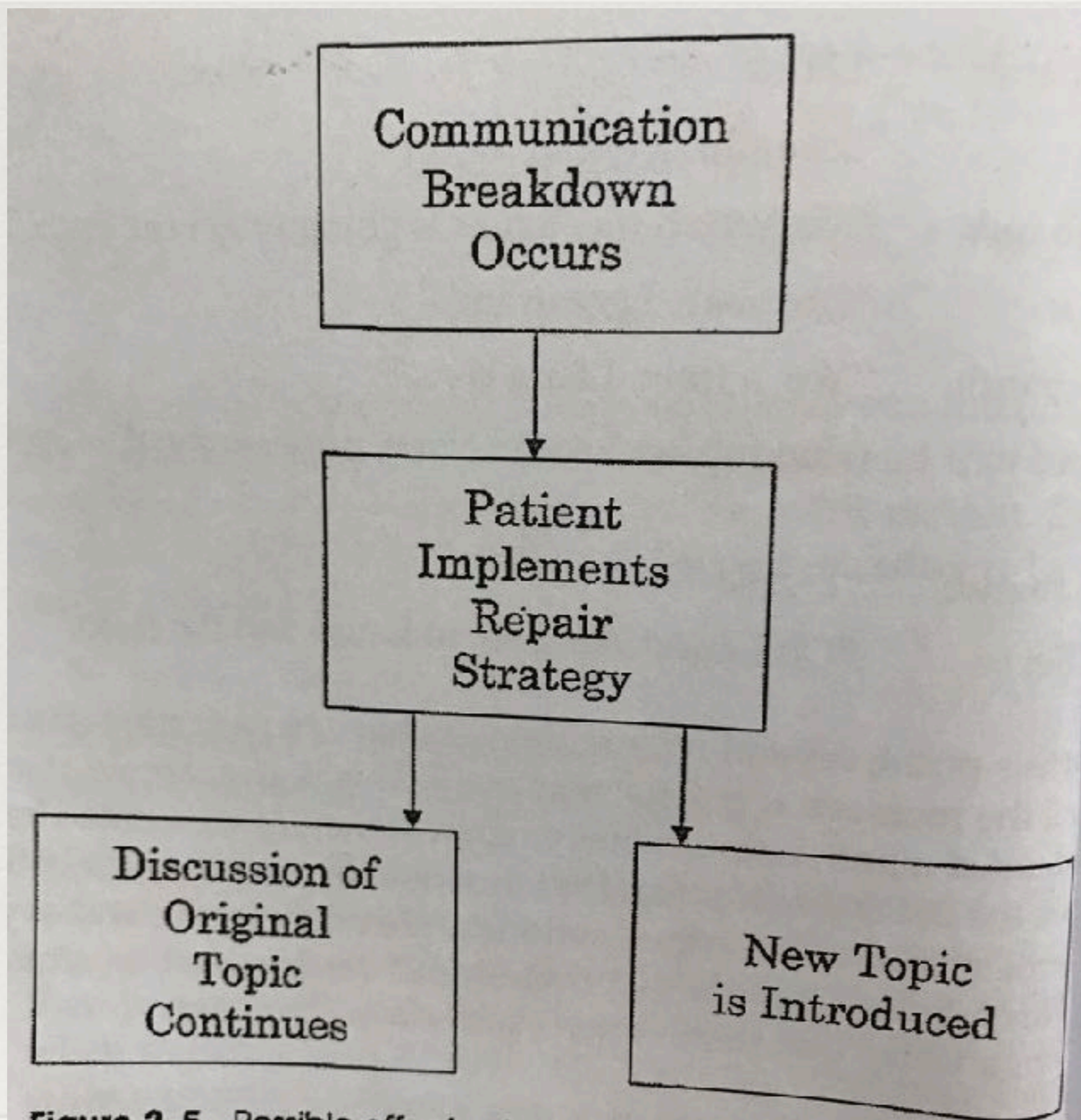
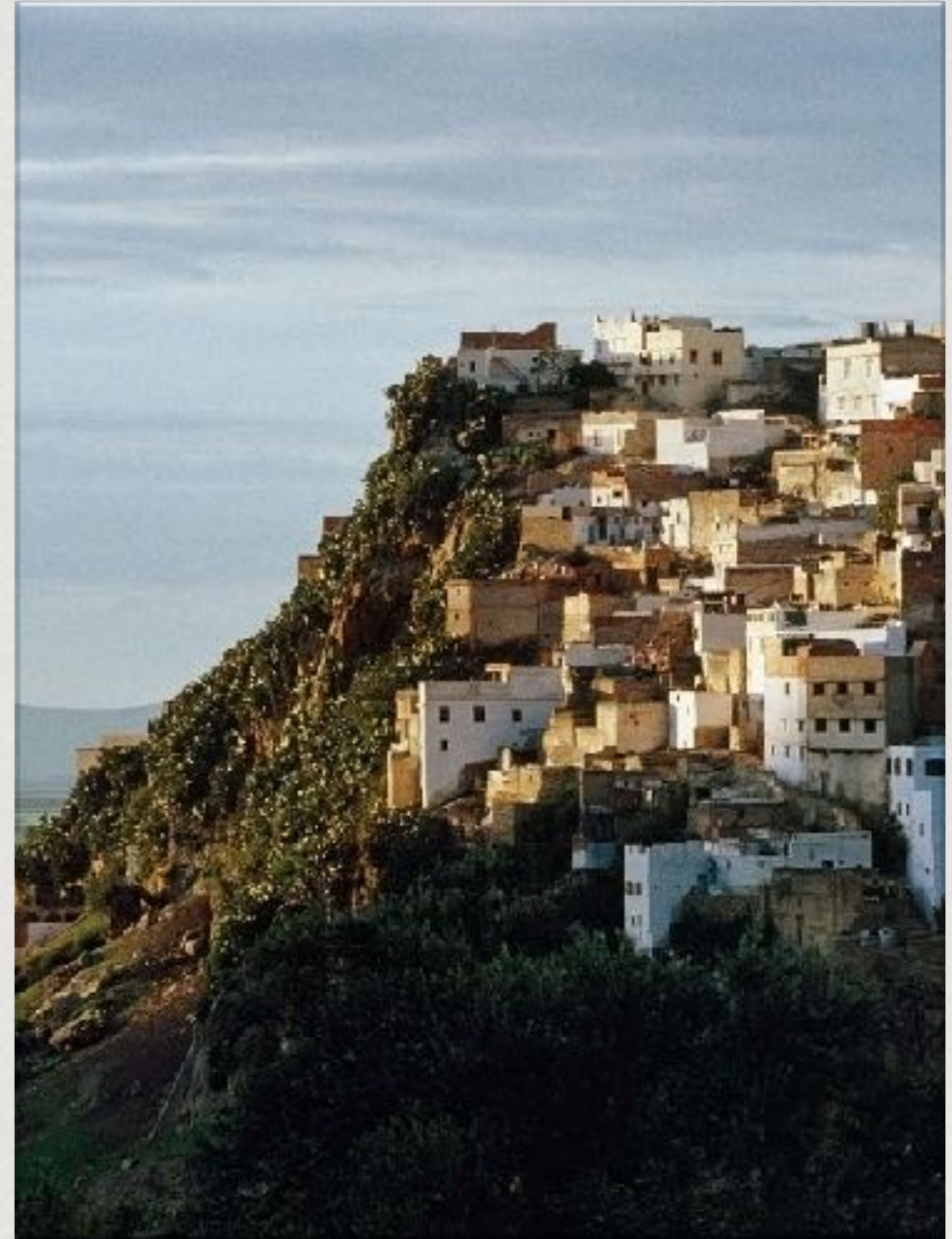


Figure 2.5 Possible outcomes of communication breakdown repair

Expressive Repair strategies

- ✦ Used when the sender (HL) produce an unintelligible utterance and the receiver (conv. partner) cannot understand it. (due to a limited language skills or poor articulation)
- ✦ How?
 - *Repeating the message using their best speech* (slow down, emphasizing key words)
 - *Breaking longer sentences* into shorter sentences
 - *Using another comm. modality* (writing, mime, hand gestures “point”)

Research Related To
Communication
Strategy Use



The Repeat Repair strategy and Nonspecific Repair strategy

- ✦ **Most** individual ask CP **to repeat** a message following comm. breakdown *than* **simplify it, restructure it, or elaborate.**
- ✦ **Most** common repair tactic is **to say “What?”, “Huh”, or “Pardon”** (Nonspecific) —> unfavourable reactions from the judges/ comm. partner.
- ✦ **Restructuring** the message following breakdown leads to **better** understanding than just **repeating it.**

Who Use Repair Strategies, When, What, and What Are the Benefits?

- ✿ **Adults Hard-of-Hearing** are most likely to use repair strategies.
- ✿ People generally are more likely to use comm. strategies if their comm. partner is **familiar** rather than **unfamiliar**.
- ✿ Individuals **who use repair strategies** are **less** likely to feel **frustrated** with their speechreading skills and **less** likely to **avoid social interactions** than individuals **who say nothing**.
- ✿ Shared characteristics for people **not** using comm. strategies:
 - lower level of education
 - have experienced a sudden HL
 - received minimal benefit from their listening devices.

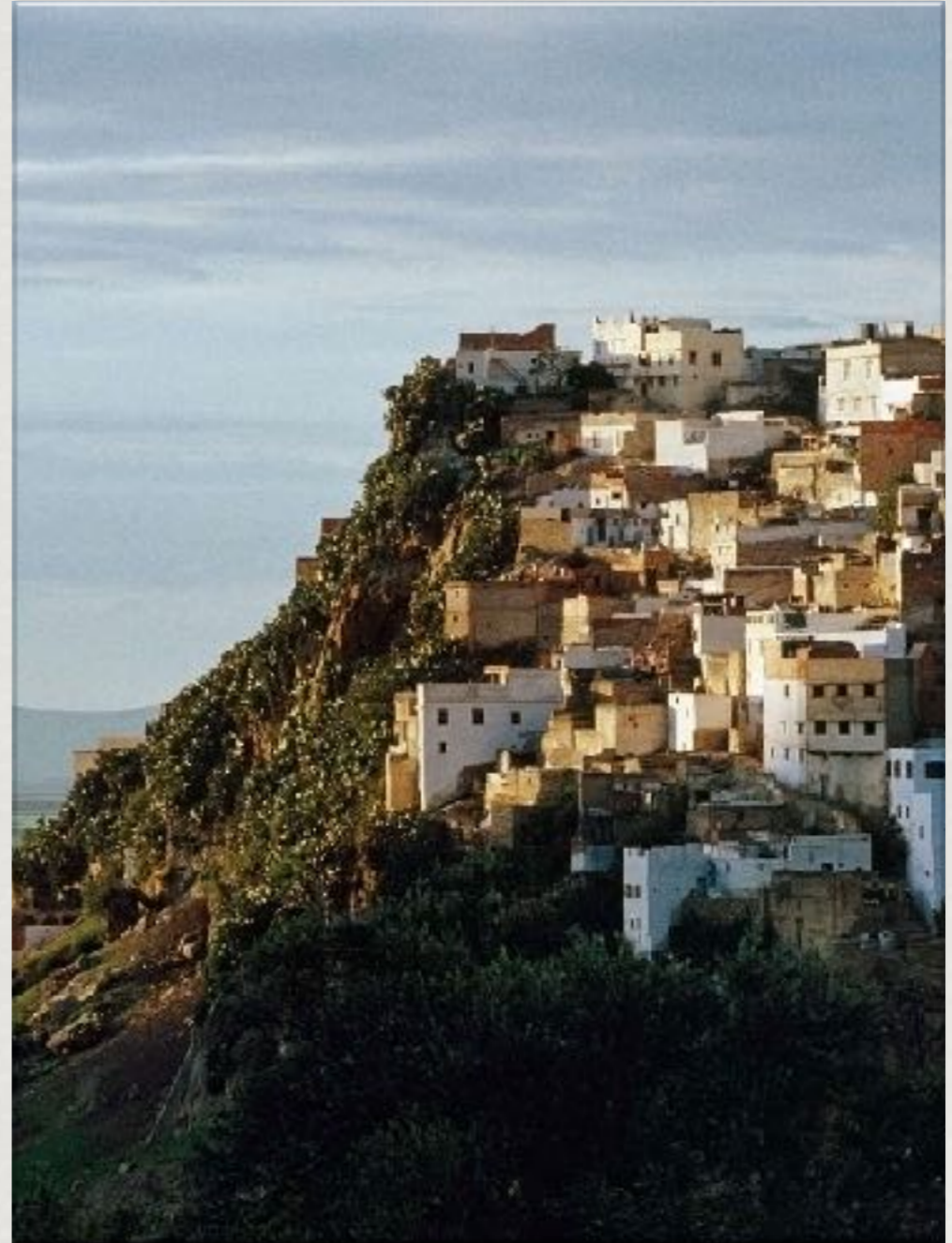
Informing a Communication Partner About a Hearing Loss

- ✿ 44% revealed the HL (tell the partner)
- ✿ *The problem:* once the pt. **revealed** the HL —> the conversation began to centre around the **topic of hearing loss/ difficulties** rather than **the topic of interest**.
- ✿ **HL people** they don't want the loss to become the focus of the discussion.

You Say, I say

- ✦ Repair strategy-response *adjacency pairs* often emerge when a hard-of-hearing person interacts with a normally hearing person.
- ✦ includes:
 - **Nonspecific** repair strategy (what?)-**message repetition** response
 - **Request for info.** repair strategy-**provide inf.** response
 - **Confirmation** repair strategy-**feedback** response

Conversational Style and Behaviors



Conversational Style

✿ 3 conversational styles, adults with HL may exhibit:

1) Passive

- **Withdraws** from conversation
- **Bluffs** and **pretends** to recognize utterances
- **Avoid** social interactions and group gatherings in order to avoid communication difficulties.

2) Aggressive (hostility, belligerence, bad attitude)

- May blame others for misunderstanding (could lead to insulting)

3) Assertive

- Respect the rights of their comm. partner, while expressing their needs and emotions.
- Takes responsibility for managing comm. difficulties in a way that is considerate of comm. partners

Communication Behaviors

- **Interactive behavior:** is the use of cooperative conversational tactics, consistent with an assertive conversational style.
 - Share responsibility with their conv. partners for **advancing/selecting** a topic of conversation
 - **Do not dominate** discussion
 - **Show interest** in what their comm. partner say
 - Attempt to **respond appropriately to** comm. partners **remarks**.

✦ **Non-Interactive** behavior: is characteristic of *passive behavior* style.

- Bluff
- Not contribute to the topic development
- Not participate in selecting a topic
- Not respond to turn-taking signals

✦ **Dominating** conversational behaviors are characteristic of an *aggressive conv.* style.

- Take extend speaking turns

- Interrupt

- Use abrupt topic changes

- Dominate the conversation in order to be aware of what being talked about.

- Avoid asking question

✦ Conversational Behaviors may **overlap** during the same conversation



Assessment of Conversational Fluency and Communication Handicap

✦ Communication strategies training program **begins** and **ends** with an assessment.

✦ Assessment for:

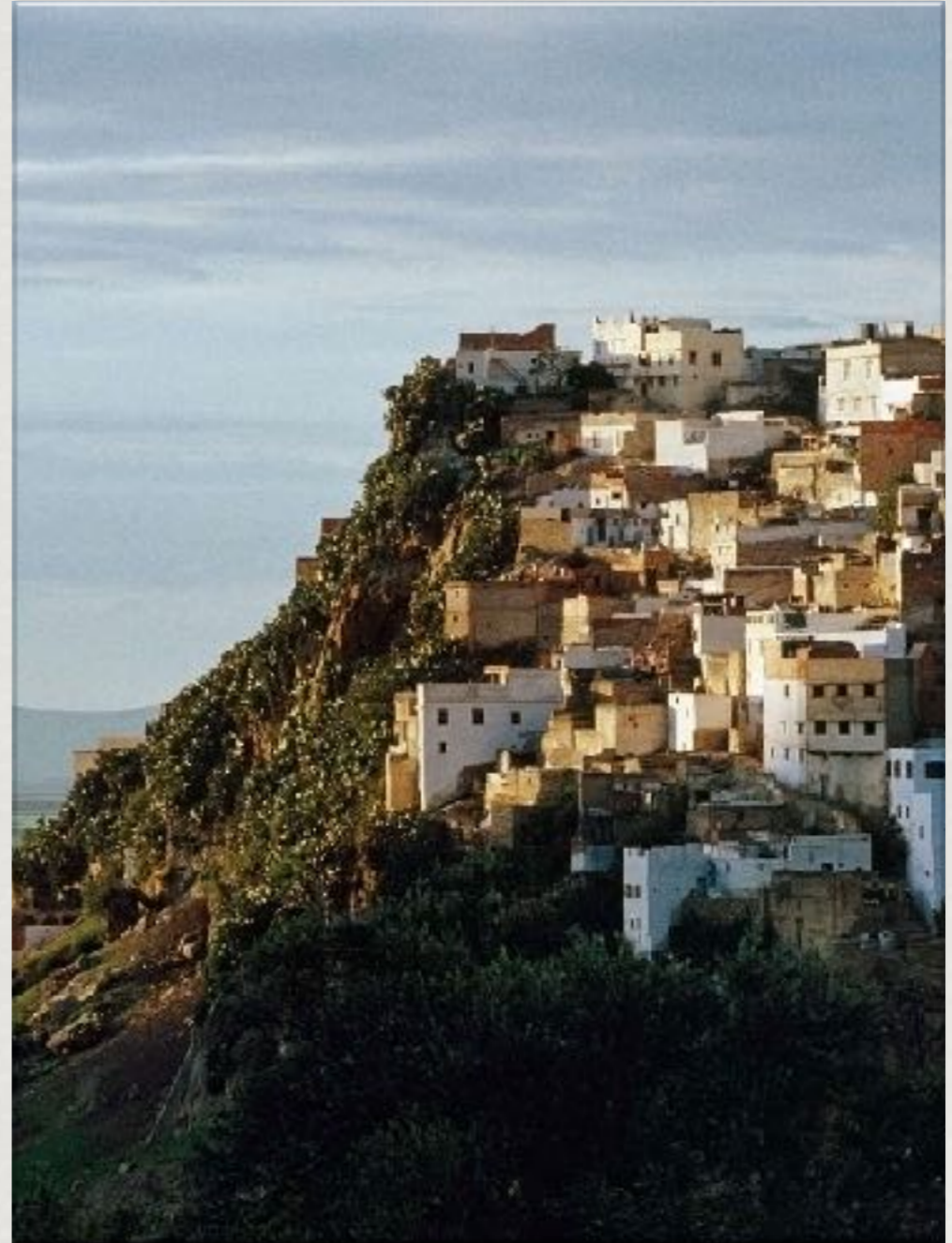
- Conversational fluency
- Communication handicap

✦ **Initial assessment**

- To determine the needed daily comm. demand.
- Eval. the impact of HL on daily activities.
- Identify the worse setting (problem arise)
- Document the engaging social activities
- Eval. the effectiveness of used comm. strategies (in different settings)
- Document their responsibilities.

- ✦ The goal of assessment **determines** the measurement tools (interview, questionnaire, informal conversation, structured comm. interactions....)
- ✦ **Final assessment** (to check improvement in **conv. fluency** or **comm. handicap** after training, using the repeated measurement tools or one-time-only measures **questionnaire**)
- ✦ Need to know what the pt.'s **audiogram** looks like (aided and unaided) and the pt.'s **word recognition**.

Conversational Fluency



Conversational Fluency

- ✦ Relates to how smoothly conversation unfolds.
- ✦ **Factors** to define conv. fluency:
 - **Time spent in repairing** communication breakdowns.
 - **Exchange of information** and ideas
 - **Speaking time** is shared
- ✦ Conversation fluency could be **low** or **high**
- ✦ **Sociolinguistics** is a branch of linguistics that studied the *effects* of *social* and *cultural* differences within a community on its use of language and conversational patterns (MLT, MLT ratio)

- ✿ **MLT** (mean length of speaking turns): computed by determining the average number of words spoken during a set number of cons. turns (often, 50 turns).
- ✿ **MLT ratio** (mean length turn ratio): the ratio of the MLTs of two speakers in conversation.
- * I.O= equal length speaking turns
- ✿ **Conversational turn** is the period during which a participant delivers a contribution to the conversation.

Example 1: Conversational Fluency

Teacher: Is Sarah studying at home, much?

Parent: Yes, and I'm thrilled with her.

Teacher: You said several weeks ago she only watched TV and used her PlayStation after school.

Parent: Yes, but we have been following your suggestions of turning off the TV.

Teacher MLT = 10.5 words (21 words/2 utterances)

Parent MLT = 9.5 words (19 words/2 utterances)

MLT ratio: 1.1 (1.0 = equal length of speaking time)



Example 1

Joan: "Has your new furniture arrived yet?"

Ann: "Yes, and I'm thrilled with it."

Joan: "You said that it was going to be French regency."

Ann: "No, I didn't go with that. My husband wanted a deco look."

Analysis: Joan's MLT = 8.0 words (16 words divided by 2 utterances)

Ann's MLT = 9.0 words (18 words divided by 2 utterances)

MLT ratio: 0.9, where 1.0 = equal length speaking turns

Example 2

Martha: "Has your new furniture arrived yet?"

Tom: "Huh?"

Martha: "Your furniture?"

Tom: (looks around, shakes head)

Martha: "How are you doing? How is your wife? . . . Mary?"

Tom: "Fine."

Analysis: Martha's MLT = 5.6 words (17 words divided by 3 utterances)

Tom's MLT = 0.7 (2 words divided by 3 utterances)

MLT ratio: 6.2, where 1.0 = equal length speaking turns

MLT = mean length turn

Traditional Audiologic Test **Versus** Measures of Conversational Fluency

✦ Traditional test word recognition vs. real-world conversational interactions (pt. performance issue)

1) Most audiologic test list present unrelated speech stimuli. **while** in typical conv. utterances are related linguistically & situationally.

2) Cts. most repeat what they hear. **While** in conv. they listen not to repeat every word.

3) Ct. interact with the partner during conversation and might ask for repair.

Ct. who repair comm. breakdowns effectively might experience fewer difficulties in convs. than standard audiologic test results would predict.

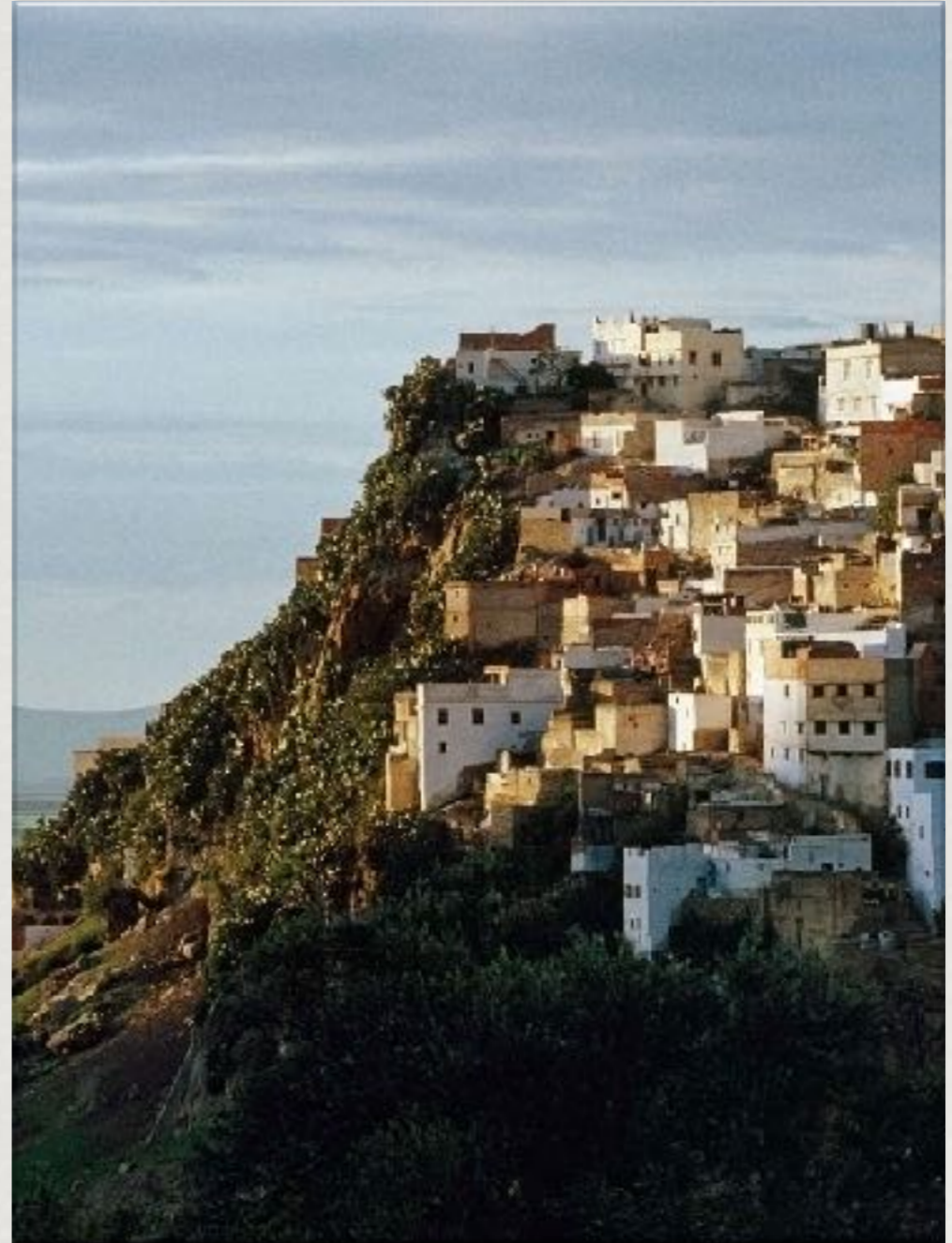
Communication Handicap and Disability

- ✿ **A communication handicap** refer to the psychological disadvantages that result from hearing loss.(limitation in performing activities of daily life)
- ✿ **Communication disability:** any restriction resulting from hearing impairment to perform an activity **in the range** that is **considered normal**. (detection /s/ sound in the word *soup*

General Consideration for Evaluating Conversational Fluency and Communication Handicap

- ✦ Conversational fluency and communication handicap can be **challenging** for SLP to assess for a number of **reasons**:
 - Variation in conversational setting, situation, and communication partner. (**talk to SLP** vs **salesman** in a store)
 - Measures vary with the topic of discussion. (high conv. fluency for **superficial topic** vs. low for **a topic in local politics**)
 - Communication difficulties may or may not arise during conversation. (difficulties when conversing in a **work place** vs. non when talking to a **family member** in SLP clinic)
 - No one measure can capture adequately the “construct” of conversational fluency or communication handicap, because both are defined by several dimensions.

Assessment Procedures of
Conversational Fluency
Communication Handicap



Interviews

- ✦ A basic assessment procedure used to elicit specific information about each individual's hearing problem.
 - Individual talk about their **conversational problems and the reasons of comm. breakdowns.**
 - Comment on subjective impression of conv. **fluency in a variety of settings (workplace, home)**
- ✦ **Advantage:** yields pt.-specific info.
- ✦ **Disadvantages:** difficult to quantify information (documentation problem when re-use to document progress, specially with a third party reimbursement)

Questionnaires

- ✿ Are procedures used to gain subjective info. about conv. fluency and comm. handicap from respondents.
- ✿ Means of **gathering** general info. *easily* and *quickly*
- ✿ Info. about:
 - How often comm. breakdown occur
 - Is there any attempt to repair comm. breakdowns & how
- ✿ Subjective impressions of comm. difficulties often do not correspond to pts. audiograms
 - Audiometric tests assess max. potential/best performance of the central or peripheral H mech.
 - Self-report instrument, assess typical performance in behavioural utilization of H ability.
- ✿ May yield either **quantitative** or **qualitative** information.

- ✦ **Open-ended questions** elicit qualitative data.

- ✦ **Examples:**

- Describe the situation wherein you typically have a problems communicating.

- What do you usually do when you do not understand someone?

- ✦ **Closed-ended questions** gather quantitative info.

- ✦ **Example:**

- I am at a cloths store. The clerk asks me a question, but I don't understand her, I am likely to:

- ask the clerk to repeat the question

- ask the clerk to say the question in a different way

- shake my head to indicate that I miss what the clerk said.

- say and do nothing

- ✦ **Advantage:** Quick and easy to administer
- ✦ **Disadvantage:** May miss pt.-specific info.

Daily Logs

- ✦ Are self-reports of behavior used by respondents for self-monitoring. (providing daily self-report)
- ✦ When completed for several consecutive days —> provide a general index of daily use of comm. strategies, conv. fluency, and info. about their aural rehabilitation needs.
- ✦ Can be used **before** and **after** participating in a comm. strategies training program and responses can be compared.
- ✦ **Advantage:** provides quantitative info. about an extended time period
- ✦ **Disadvantage:** can be reactive procedure (by monitoring use of comm. strategies, pts. may improve their use of them) —> can be used as a training procedure

Table 3-3. Example items from a daily log, designed to monitor someone's communication behaviors.

1. Think about your communication interactions today. For the following situations, circle the term (*never, a few times, many times*) that best describes how much time you spent talking today (beyond a greeting). Circle one response for each condition:

In a quiet place	Never	a few times	many times
In a noisy place	Never	a few times	many times
On the telephone	Never	a few times	many times
From another room	Never	a few times	many times
In a group of people	Never	a few times	many times

2. For the following two situations, write down a number between 0 to 100 (0 = nothing and 100 = everything) that indicates how much of what was said to you today you believe you understood.

___ while watching the talker and listening

___ while listening only

Did you ever indicate that you did not understand a spoken message today

Group Discussion

- ✦ Provides a forum for class members to discuss comm. issues.
- ✦ Usually convened on the first meeting of a comm. strategies training program.
- ✦ members construct **a list** of their comm. problems and topics they would like to include in the syllabus.
- ✦ **Advantage:** stimulate pt. to introspect and reflect
- ✦ **Disadvantage:** some pts. may be reluctant to participate



Structured Communication Interaction

- Are simulated conversational used to reflect a pt's. communication difficulties. (assessment and training uses)
- TOPICON is an example of a structured comm. interaction activity. (conv. with c/n) —> c/n monitors + Eval. conversational difficulties, then c/n and student discuss the **fluency of the interaction**.
 - **problems and ways to solve it**
 - **who spoke more and why**
 - **direction of info. flow and identify comm. strategies have been used**

TOPICON

Each participant independently examine a list of topics and indicates topics of personal interest or familiarity

One participant selects a topic for conversation from the list—reflecting personal interest, that of the other participant, or both

The client and the partner conduct a brief conversation on the chosen topic--2 to 5 minutes while the clinician evaluates the conversation

(example)

Background noise, visual distractions, and/or speech and language difficulties may be introduced during the conversation, while the clinician monitors and assesses events

The participants and the clinician discuss the content and fluency of the conversation, considering avoidance or resolution of difficulties.

(Erber, 1996)



✿ Conversation fluency can be evaluated with a consideration of the following:

- 1) number of prolonged pauses
- 2) number of restarts
- 3) number of topic shift
- 4) interruptions of turn-taking
- 5) level of abstraction and superficiality
- 6) presence of self-consciousness
- 7) the degree of understanding

Structured Communication Interaction

Question-Answer Session

Quest?AR

- ✿ Conversation-based communication therapy procedure that provides interactive practice with common question-answer sequences.
- ✿ The client asks a series of questions and learns to anticipate and accurately receive spoken messages
- ✿ Occasionally, listening difficulties are added to induce communication breakdown
- ✿ Provides person with hearing loss confidence in asking response-limiting questions

Example: (yes/no; choice; wh questions, etc.)

Unstructured Communication Interaction

- ✦ Spontaneous interaction with few external constraints
- ✦ Free flowing conversation between patient and communication partner

Advantage

good ecological validity—mimics real-world interaction



Disadvantage

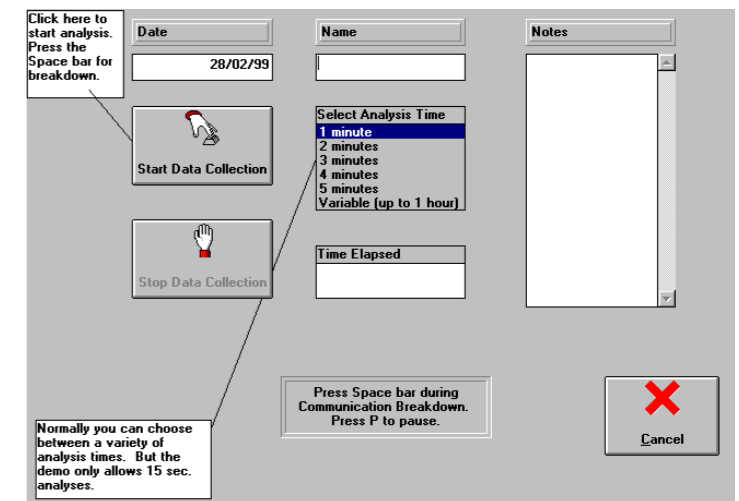
results may vary as a function of the communication parameter

Example: Dyalog, ratings, transcription analysis

Unstructured Communication Interaction

DYALOG

-  Software with computer to objectively measure the fluency of conversation before, during, and after communication therapy
-  Observe the client in conversation (live or videotaped). Press the "space bar" on the computer keyboard whenever misunderstanding occurs during conversation and "repair" (e.g., repetition, clarification) is needed. Release the space bar when fluent conversation is restored. At the end of the conversation (or after a pre-selected interval), the computer will draw a graph of conversational fluency as a function of time, and also will display:



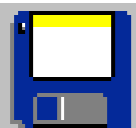
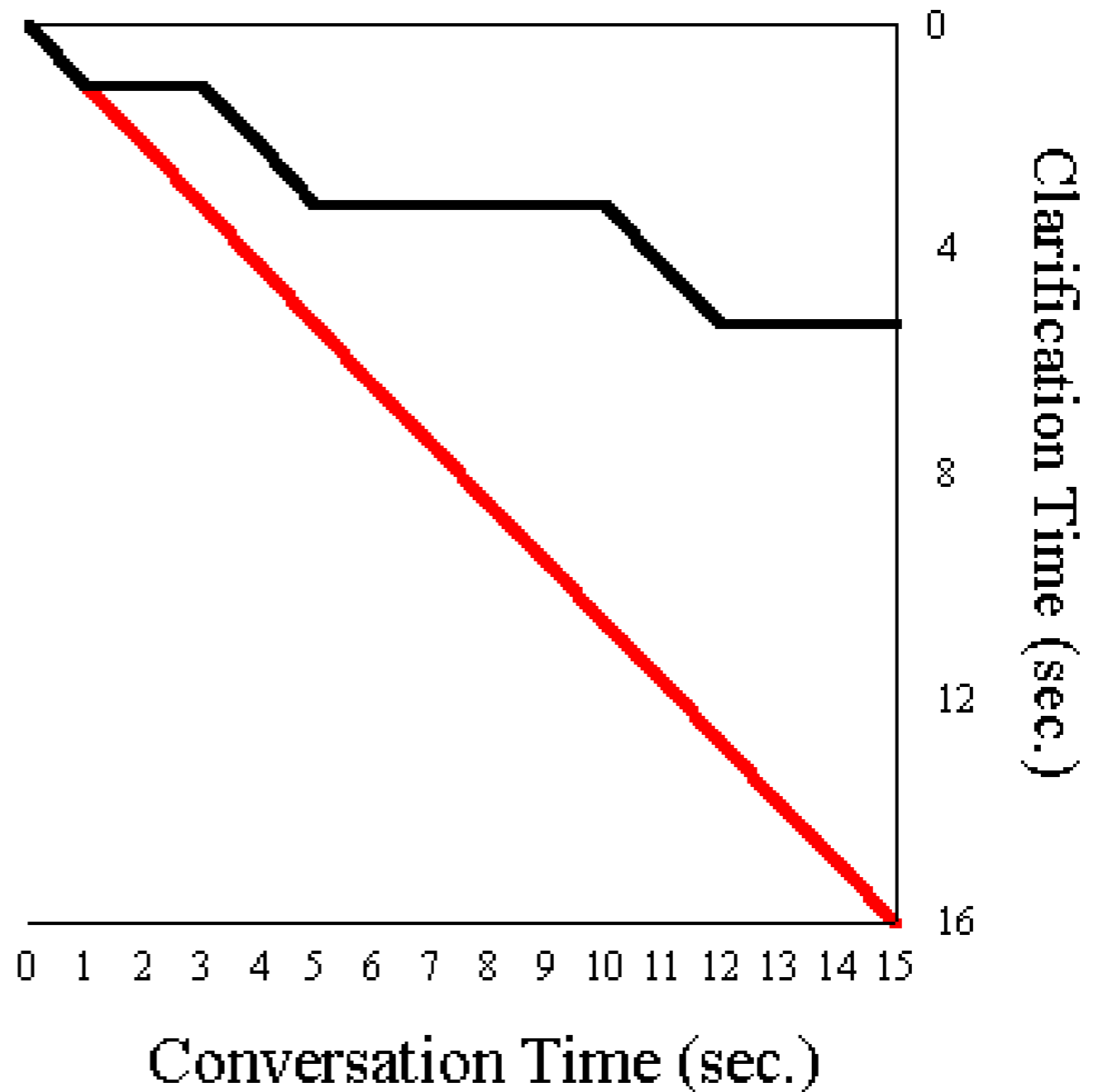
Dyalog Results	
Conversation Time (time in seconds)	15
Parrot Software, Copyright 1997	

Dyalog Results

Conversation Time (time in seconds)	15
Clarification (time in seconds)	5
Clarification (proportion of conversation time)	.33
Clarification (number of events)	3
Clarification (average time in seconds per event)	1.67

Parrot Software, Copyright 1997

28/02/99



Save Results



Print Graph



Examine Data

Exit



Print Notes

Empty text area for printing notes.

Click here to start analysis. Press the Space bar for breakdown.

Date
28/02/99

Name

Notes


Start Data Collection

Select Analysis Time
1 minute
2 minutes
3 minutes
4 minutes
5 minutes
Variable (up to 1 hour)


Stop Data Collection

Time Elapsed

--

Press Space bar during Communication Breakdown. Press P to pause.


Cancel

Normally you can choose between a variety of analysis times. But the demo only allows 15 sec. analyses.



Communication Strategies Training

✦ Many ways to provide training, ranged from **making printed materials** (at waiting room) to **presenting a weekly program** (for weeks or months).

✦ Training **activities** may include:

- paper and pencil task
- role-playing
- group discussion
- workbook exercise

✦ Training program **designed to meet:**

- participants expectations
- age
- socioeconomic background
- lifestyle
- particular communication problem

Sensitivity to People's Self-Perception

- ✦ When dealing with hard-of-hearing adults, SLP should consider how people perceive communication problems
 - HI burden on other people —> withdraw —> depression
 - H-Aid = glasses —> difficult to understand why a person wearing HAs doesn't understand what is being said.

General Program Content

✦ The content of comm. strategies training program concerns:

- **problems** specifically **related to HL**
- and **how** to **minimize** these problems
- **No sympathy** expressed
- **No** personal problems **unrelated to HL**

✦ Content includes two types of comm. strategies:

facilitative and **repair**

- people learn to **modify the four factors** that affect comm. success (talker, message, environment, and listener)
- and learn to **rectify breakdowns** in communication.

(developing skills to deal **assertively** with comm. difficulties)

Issues to Consider When Developing A Training Program

✦ The optimum program length

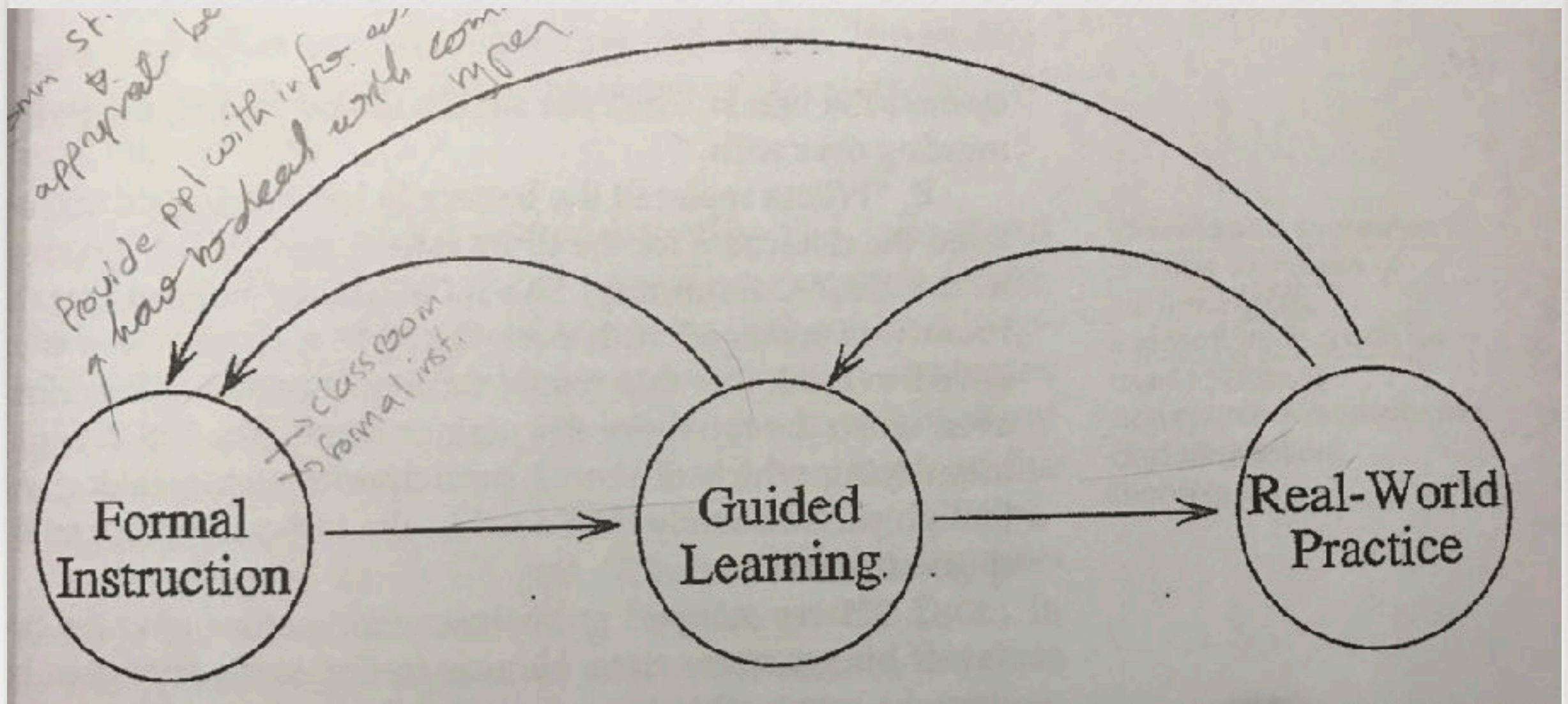
Standard program require 12 to 40 hours (intensive instruction during a week-long period, meeting 4-7 hours/day or spread over an 8-15 week period with each session lasting several hours each week).

✦ The class format

- One-on-one classes
- Couple's session
- In a group (most effective means is the group setting) Why?
- when working with a group: group spirit (*esprit de corps*) is important (Table 4-1)

✦ The participant's gender, age, life stage, culture, motivation to participate, and specific comm. difficulties. (materials and activities need to be modified to meet these variables)

Model for Training



Formal Instruction

- ✿ The **first stage** in a communication strategies program.
- ✿ **Provides** individuals with **information** about various **types** of comm. strategies and appropriate listening and speaking **behaviours** with examples.
- ✿ in a group settings:
 - **ask** people to talk about **ways to manage** comm. difficulties.
 - **use** chalkboard or oversized hanging notebook to write participant's ideas and responses (to stimulate contributions to ongoing discussion)
- ✿ Dialogue vs. formal presentation

◆ Example:

During the comm. strategies training program, when the *content* of handling comm. difficulties styles and the ct.'s alternative styles (passive, aggressive, and assertive behaviours) *is* included

- Using **paper & pencil** “exercise” —> identify communication styles in different situations. p.73
- Answers and discussion are provided afterwards.

Guided Learning

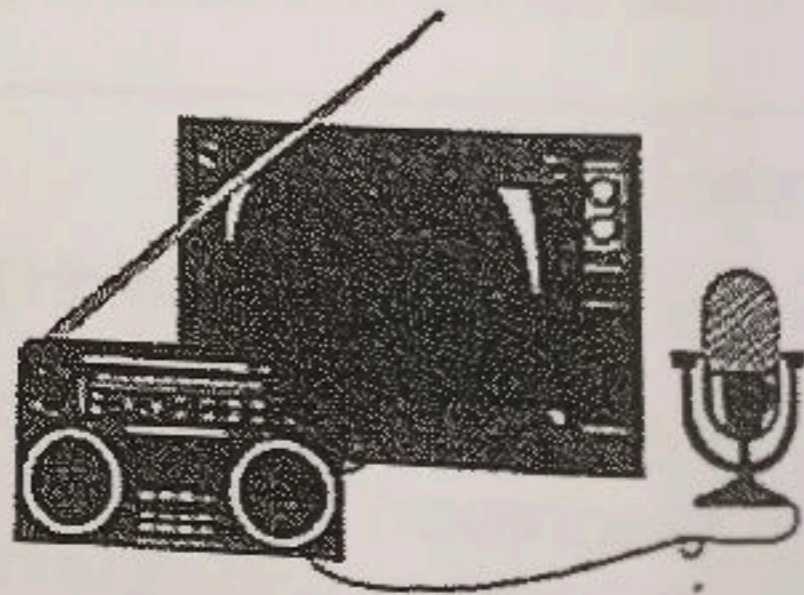
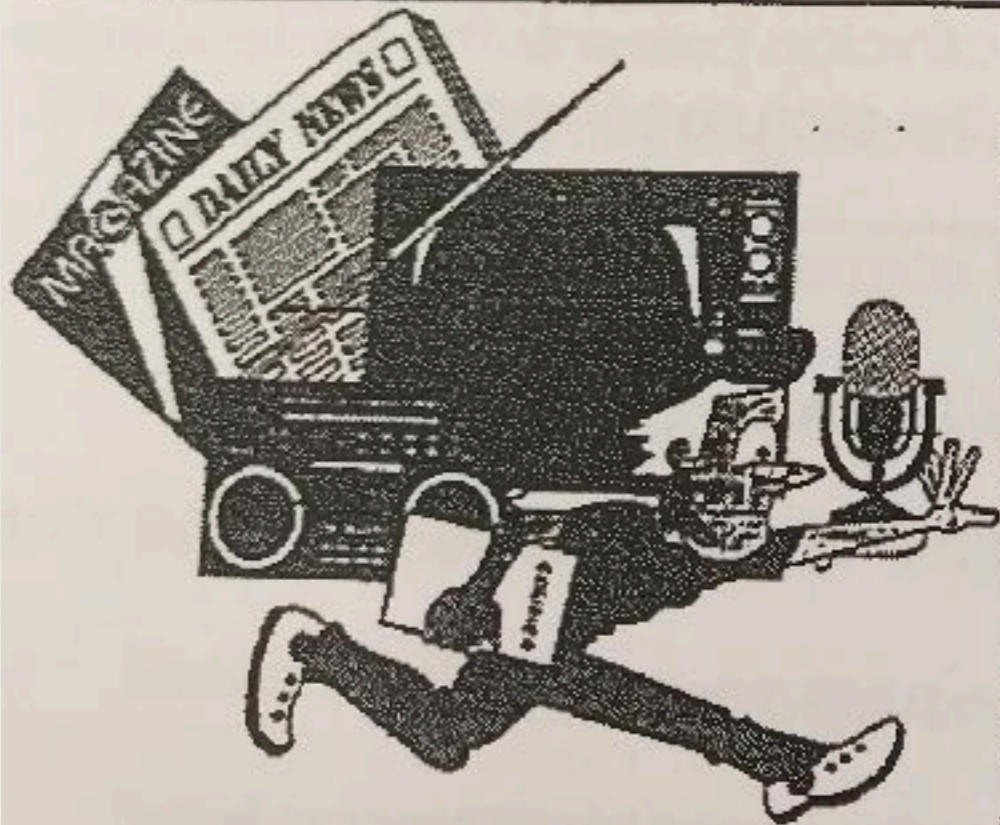
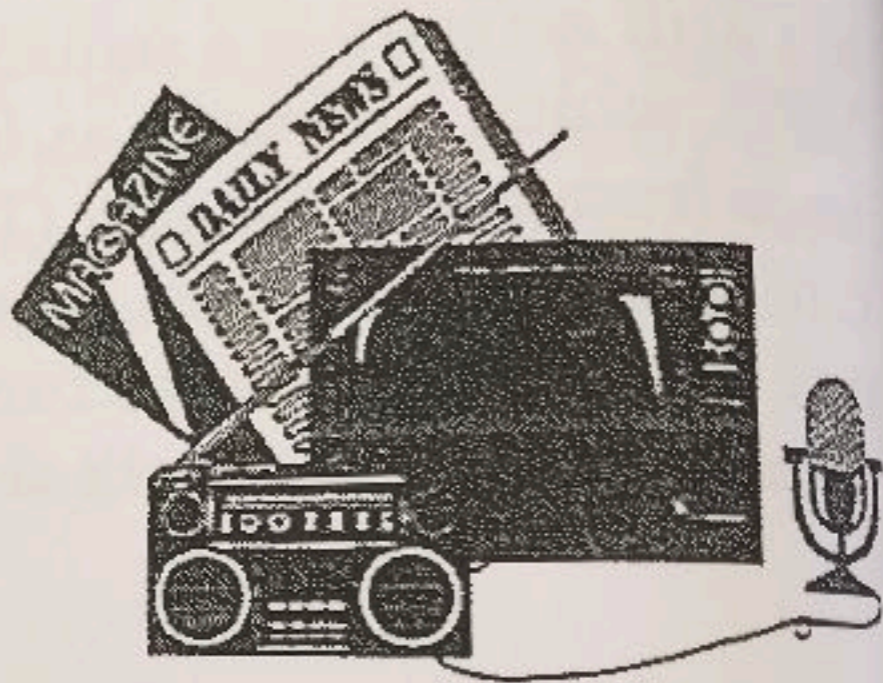
- ✦ The **second stage** in a comm. strategies training program
- ✦ Students use conversational strategies in a structured setting
- ✦ Activities for guided learning include: **role-playing**, **analysis of videotaped scenarios**, **continuous discourse tracing**, and **drill activities**.

- ✦ In **role-playing**: individual participate in hypothetical real-world situations and interactions.
- ✦ Participant practice using comm. strategies and other assertive listening behaviours. (good situation if parallels to participant's everyday experiences)
- ✦ In **videotaped scenarios**: provide examples of comm. interactions that can be used to discuss comm. strategies and stimulation techniques.
- ✦ Help pts. identify and talk about comm. problems (by providing concrete examples)

- ✦ In **continuous discourse tracking**: the listener/receiver attempts to repeat verbatim text presented by a reader/sender. If receiver cannot recognize it, then he/she must be responsible for using repair strategies.
- ✦ The instructor provides coaching/suggestions in how to select/implement particular repair strategies effectively.



- ✦ In **drill activity**: repeated exercises and rote activities.
- ✦ A sentence identification task
 - c/n **reads a sentence** from a printed text
 - 4-9 split picture page in front the ct.
 - ct. choose the pic. illustrates the sentence
 - pics. in a pic.-split share similar actors or actions
 - **pt.** must **identify** more than **one** or **two** words in order to respond correctly
 - if **unable** to identify the correct pic. —> **repair strategy** must be used
- ✦ c/n may speak with inappropriate behavior (turned away from the ct.)
 - This training provides practice in using **facilitative** + **repair** comm. strategies



Real-Word Practice

- ✿ The **third stage** (final) in a comm. strategies training program
- ✿ Students practice a new skill/behaviour in an everyday environment.
- ✿ Then, report back to the class about success and problems and share ideas about how to handle problems in the future

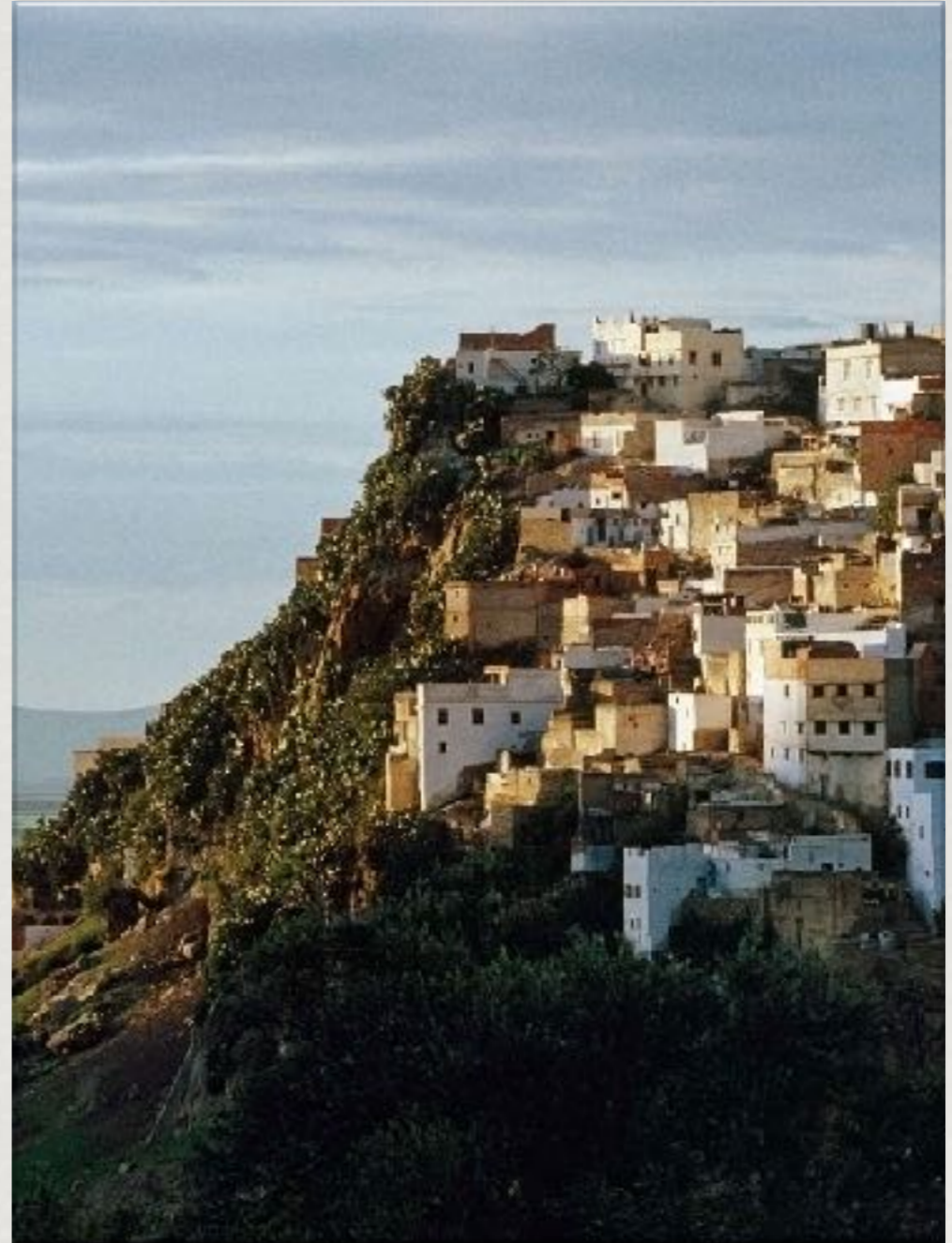
Example of a Real-World Training Activity

Topic = Listening for Directions

Instructions: Ask a partner to hide an object somewhere in your house. Then ask your partner for directions for finding it. Only listen as the directions are told to you, and ask for clarification if necessary. After finding the object, answer the following questions:

1. Did you understand the directions?
2. Did you ask for clarification about any part of the directions?
If yes, what did you say? How did your partner respond?
3. Did you have any problems in finding the object? If yes, did you ask for more information from your partner? What did you say?

Short-Term Training



Short-Term Training

- ✿ No time to commit to a longer program from ct. **or** the clinic may not have a personnel available to conduct training.
- ✿ Two short approaches:
 - **First** one: to provide materials and self-directed instruction.
 - **Second** one: to provide a short tutorial.

Materials Approach

- ✦ A brief time interval
- ✦ Includes:
 - providing printed and recorded materials about comm. strategies to HL (**clinic library, audiovideo tape station**, or printed **pamphlets**)

Assignment about conversational fluency + (واجب المطوية كل ٤ طلاب مطوية)

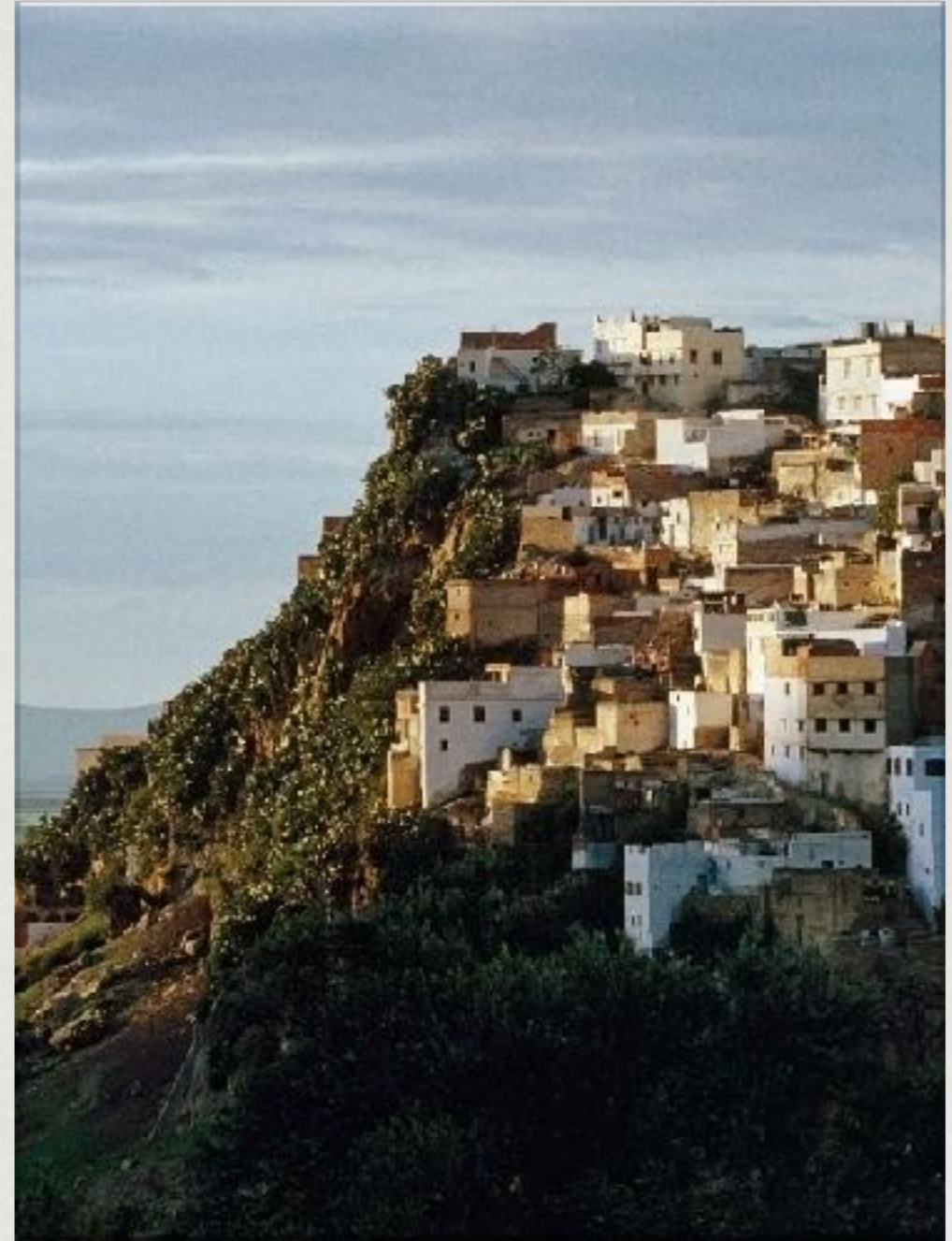
(Midterm)

- ✦ Library (clinic's waiting room): periodicals, HL books, comm. strategies, speech & auditory training activities, and assistive devices. (can be read or borrowed)
- ✦ Video cassette player might be placed in the library/waiting room

Short Tutorial

- ★ **WATCH** (Montgomery 1994)
- ★ Require 1 hour to administer
- **W**= **Watch** the talker's mouth, not his eyes (speechread **vs.** gestures)
- **A**= **Ask** specific questions (specific repair strategies **vs.** non-specific RS)
- **T**= **Talk** about your hearing loss (reveals it to the partner)
- **C**= **Change** the situation (identify the situation)
- **H**= **Health care** knowledge is acquired (c/n provide resources about HC + HL info.)

Communication Strategies
Training for Frequent
Communication Partners

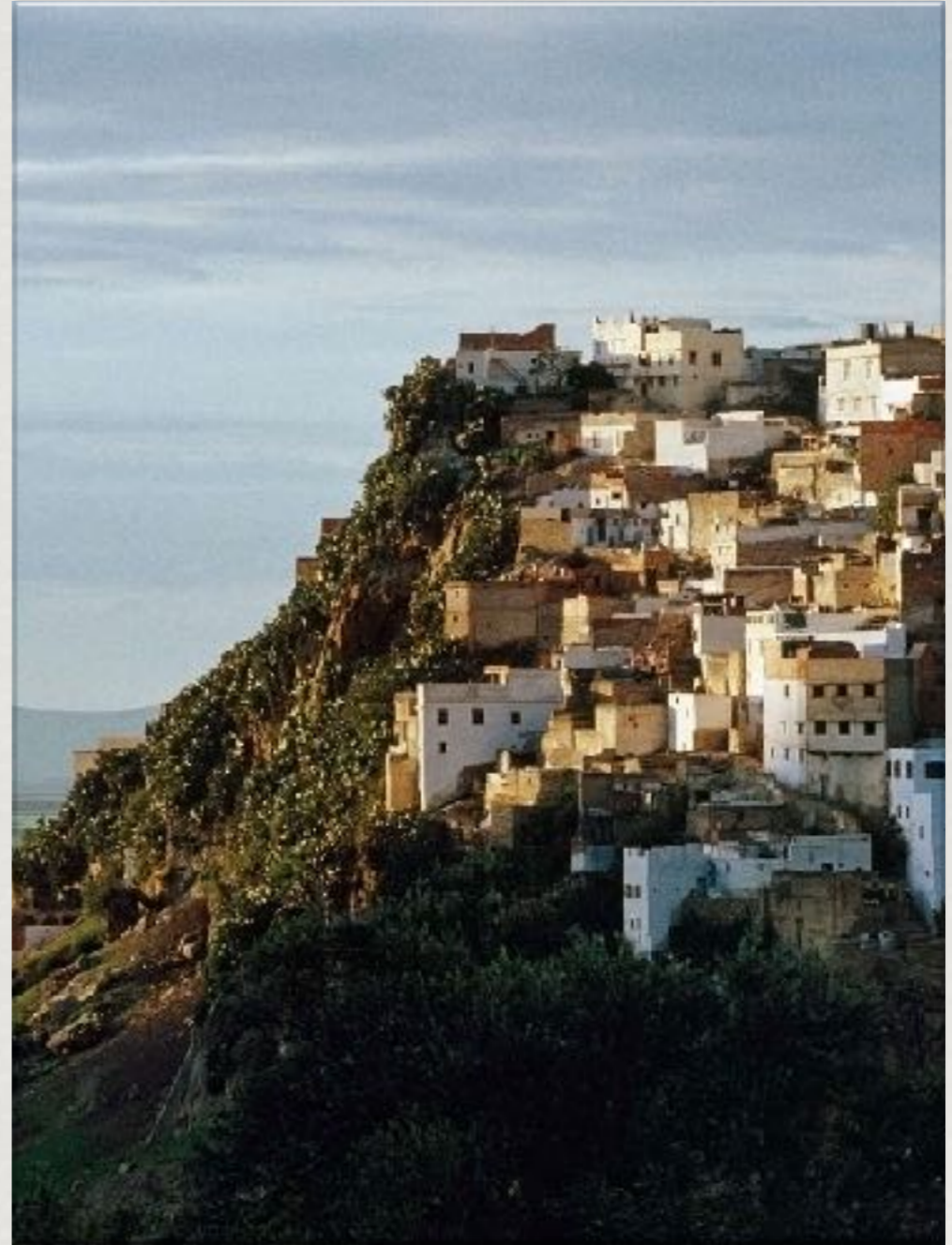


- ★ The partner *could be*: spouse, son, daughter, close friend, or health-care provider (parents for a child)
- ★ Goals:
 - To foster empathy for the difficulty of speechreading task.
 - To encourage the use of appropriate speaking behaviors
 - To learn how to make messages easy to be recognized.
 - To repair comm. breakdowns effectively
- ★ **Same** comm. strategies training program **topics content**.
- ★ Provided **at same time** that the hard-of-hearing receives training
- ★ Frequently **within the same class**



- ✦ Partners may receive support too, by speech & Hearing professionals. (adjusting to the changes in life quality “
 - Excessive noise in the home “loud TV, loud speaking”
 - Recurring misunderstandings
 - Feeling of isolation and loneliness due to decreased social interaction outside the home
 - Assuming extra tasks “interpreting during group interactions, acting as intermediary in the telephone calls”
- ✦ Comm. strategies training + the counselling → accelerate the adjustment process for the comm. partners

Communication
strategies Training
for Children



- ✦ The program focus on: **facilitative** & **Repair** St.

Facilitative and Receptive Repair strategies:

1- Lazer video-disc based training programs

2- one-on-one printed programs

- ✦ Children programs are usually **simplified**

- Instruction for only **three** repair strategies “say it again, tell me in different way, what are you talking about”. Why?

Formal Instructions

- ✦ A review of effective listening behaviors
 - Pay attention
 - Watch the talker's face
 - Try to identify key points

- ✦ How to ask to clarify the message
 - When u don't understand ask the talker to **say just one word**

- ✦ Generalization problem?
 - Breakdowns occurred in a gracious/ socially accepted manner —> hard to identify
 - Finding the words to instruct the talker is not easy

- ✦ C/n should reiterate **يكرر formally taught** concepts in an **informal way** (in many different context)

Guided Learning

- ✦ Focuses the child's attention on **good listening behaviors** and **comm. strategies**
- ✦ Practice in structured settings
 - **Modeling**: watch the c/n and imitate
 - **role-playing**: created hypothetical listening situation (listen and use comm. strategies)
- ✦ SLP should select an important situation (interesting)
- ✦ Props should be as realistic as possible

Real-World Practice

After practicing in **structured settings** —>
apply to **everyday experiences**

- Table 4-4

Expressive Repair Strategies

- ✦ To be used when the child **presents a message** (with speech problem) and **no recognition** from the partner
- ✦ Child repair by trying again, using **best speech** or **adding hand gestures**
- ✦ Table 4-5 **five-steps training plan** for children to use Exp. repair strategies

- ✦ **Step 1:** Understanding basic comm. process
- ✦ **Step 2:** Understanding comm. breakdowns
- ✦ **Step 3:** Message formulation
- ✦ **Step 4:** Introduction of comm. repair strategies
- ✦ **Step 5:** Practice using comm. repair strategies

Efficacy of Training

- ✦ Few experimental investigations on comm. strategies training efficacy.
- ✦ Is training **beneficial** to those who receive it? **yes**
- ✦ **Little** if any focused on efficacy of comm. strategies training for **children**