E-Prime Experiment Design_2

To design a psychological experiment

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E-prime实验设计步骤

进行 E-Prime 实验设计主要由以下十个步骤组成：

第一步，画出实验流程图。

第二步，新建目录，存储本实验程序的相关文件。

第三步，在总过程 SessionProc 中创建指导语（Slide 控件）。

第四步，用 List Object 指定和生成流程图中的核心实验过程。

第五步，在 List Object 输入刺激材料及其相关属性。

第六步，在核心实验过程中创建核心实验过程的各个组成部分，并设置相应的呈现时间、反应方式、需要记录的数据等实验控制要素。

第七步，在总过程 SessionProc 中创建结语。

第八步，运行、调试和修改实验程序（多次）直至符合实验要求。

第九步，创建实验模块或练习模块。

第十步，编译程序生成脚本文件，拷贝中文材料、属性等控制内容到脚本文件中，运行实验。

一般实验程序流程

练习指导语

练习部分

实验阶段指导语

实验部分

结束语

整理数据分析数据

例如：

设计一个判断“词与非词”的实验

（一）画出流程图

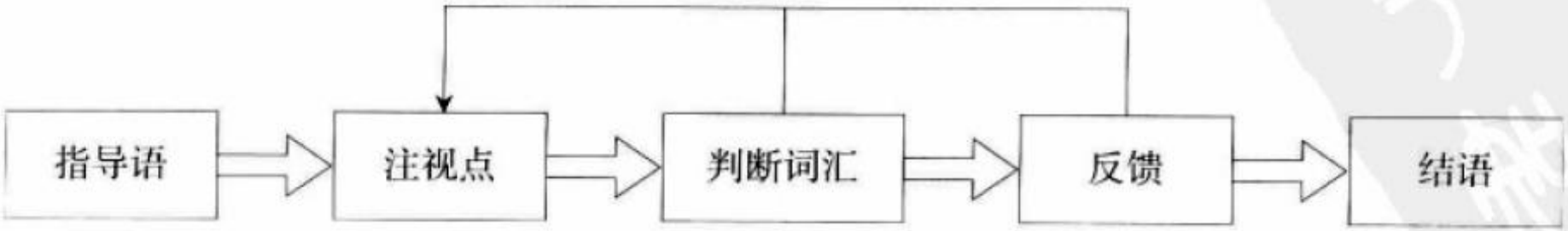
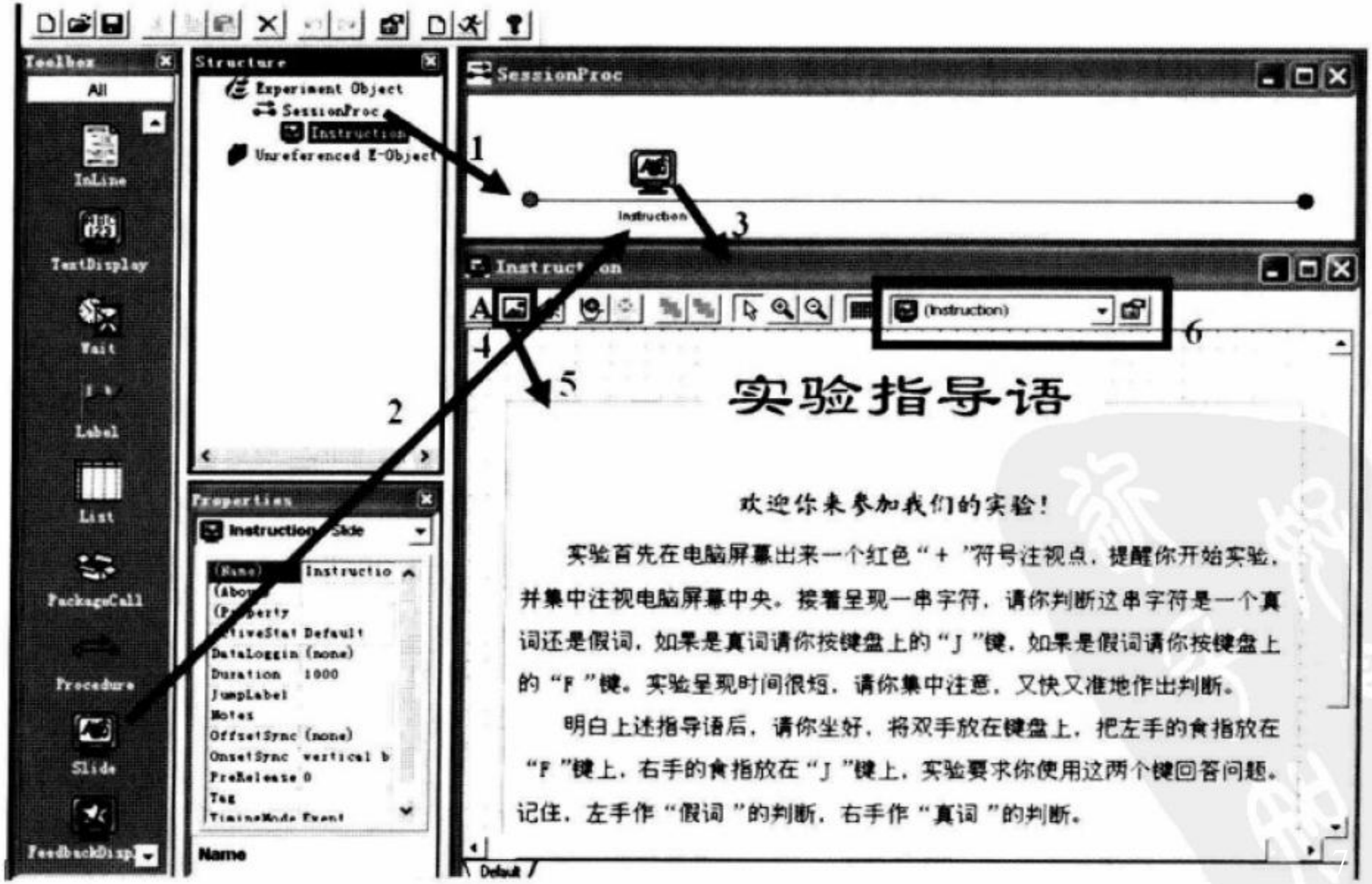


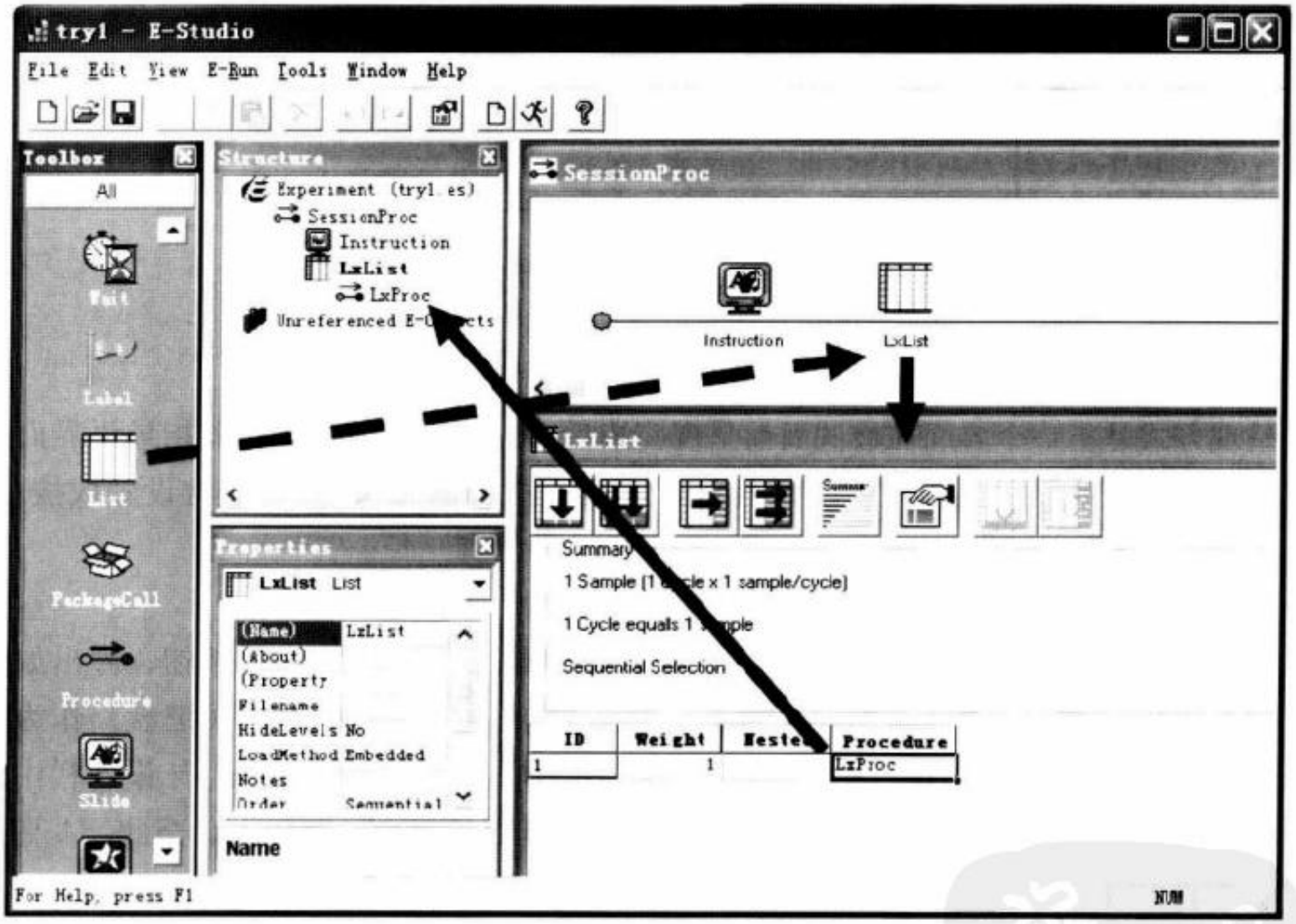
图 3－11　“词汇判断”实验流程图

（二）新建一个目录，存储本实验程序的相关文件

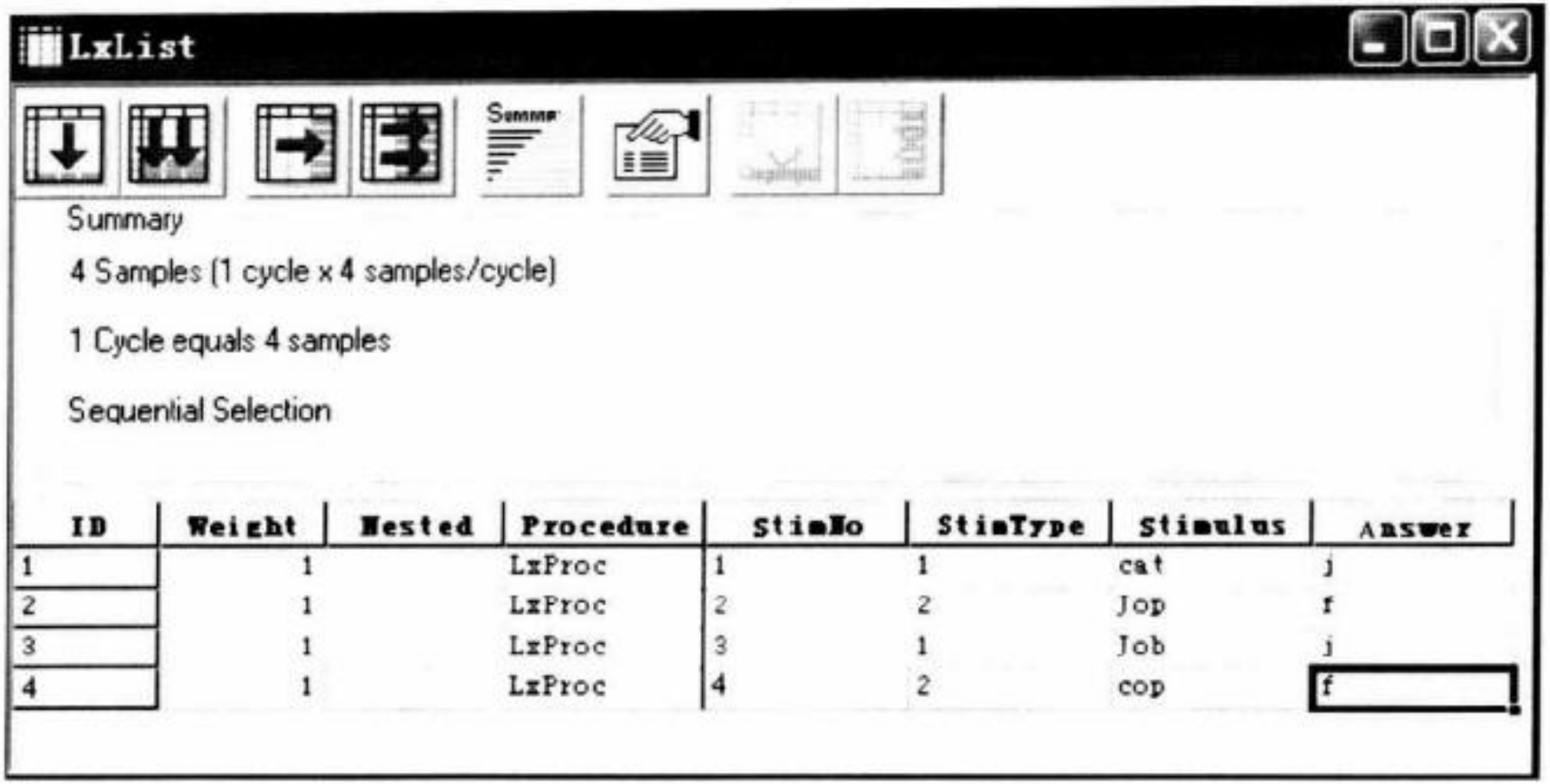
（三）用Slide控件在总过程中建立指导语



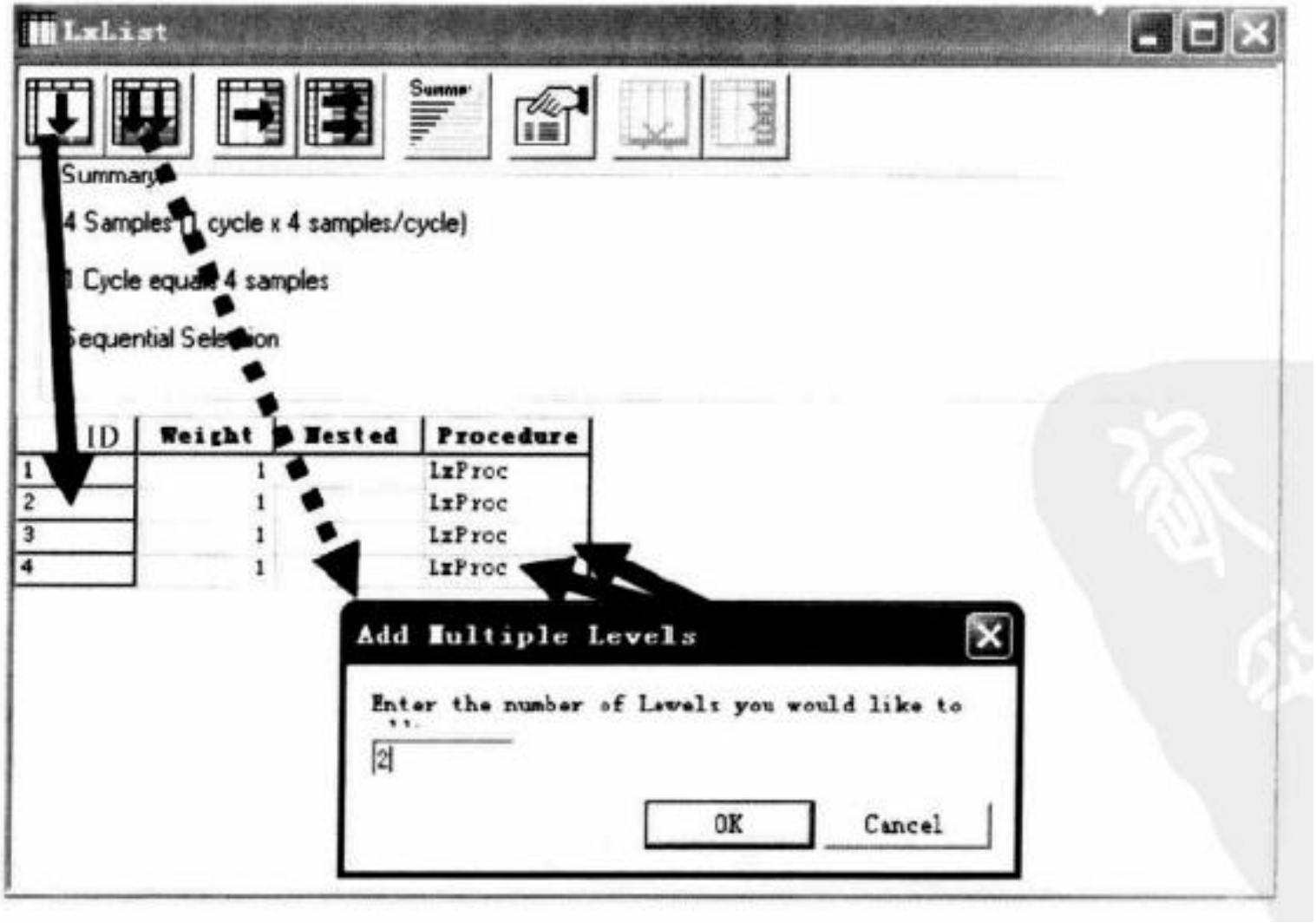
（四）用list控件指定和生成流程图中的核心实验过程

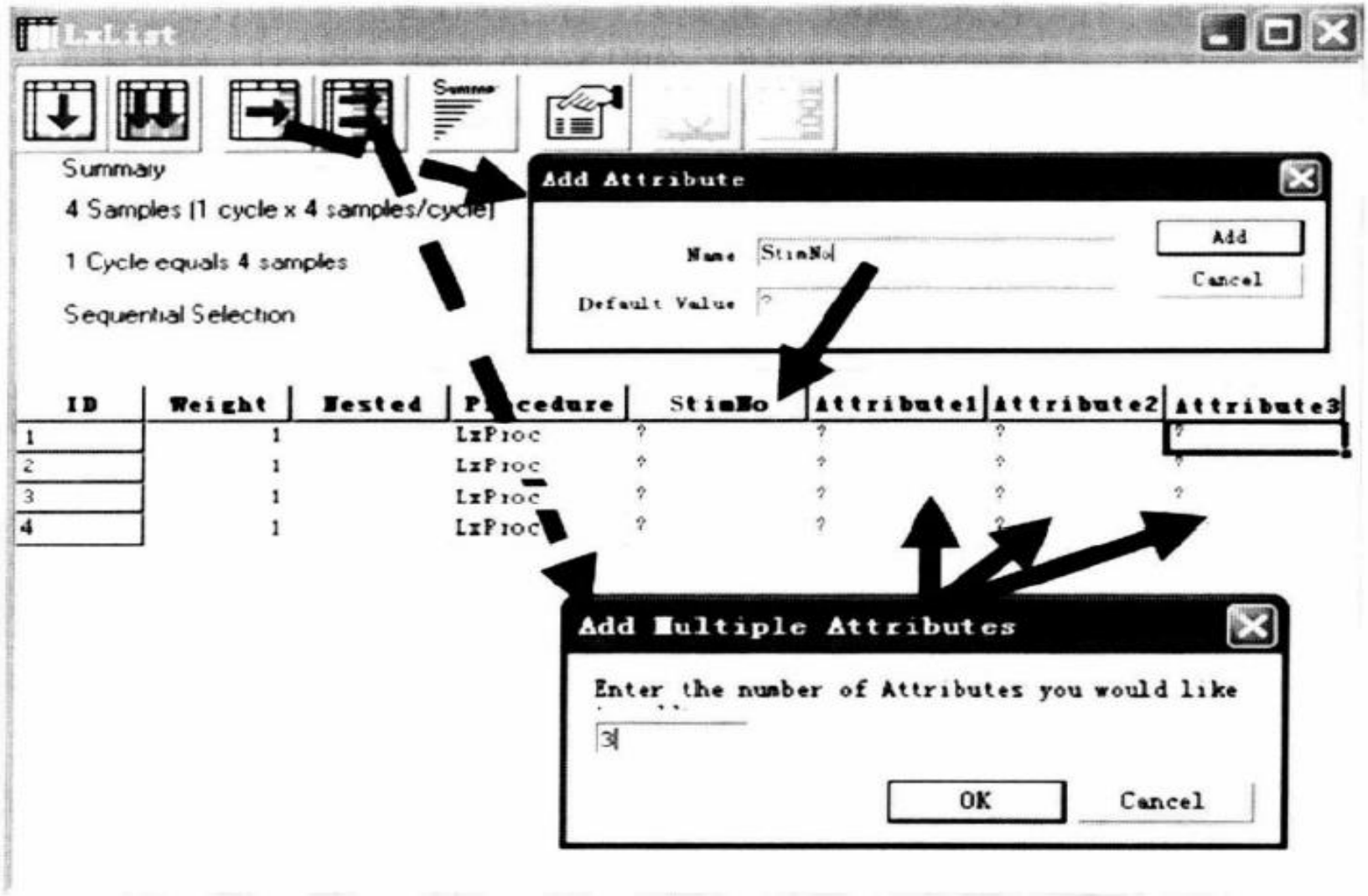


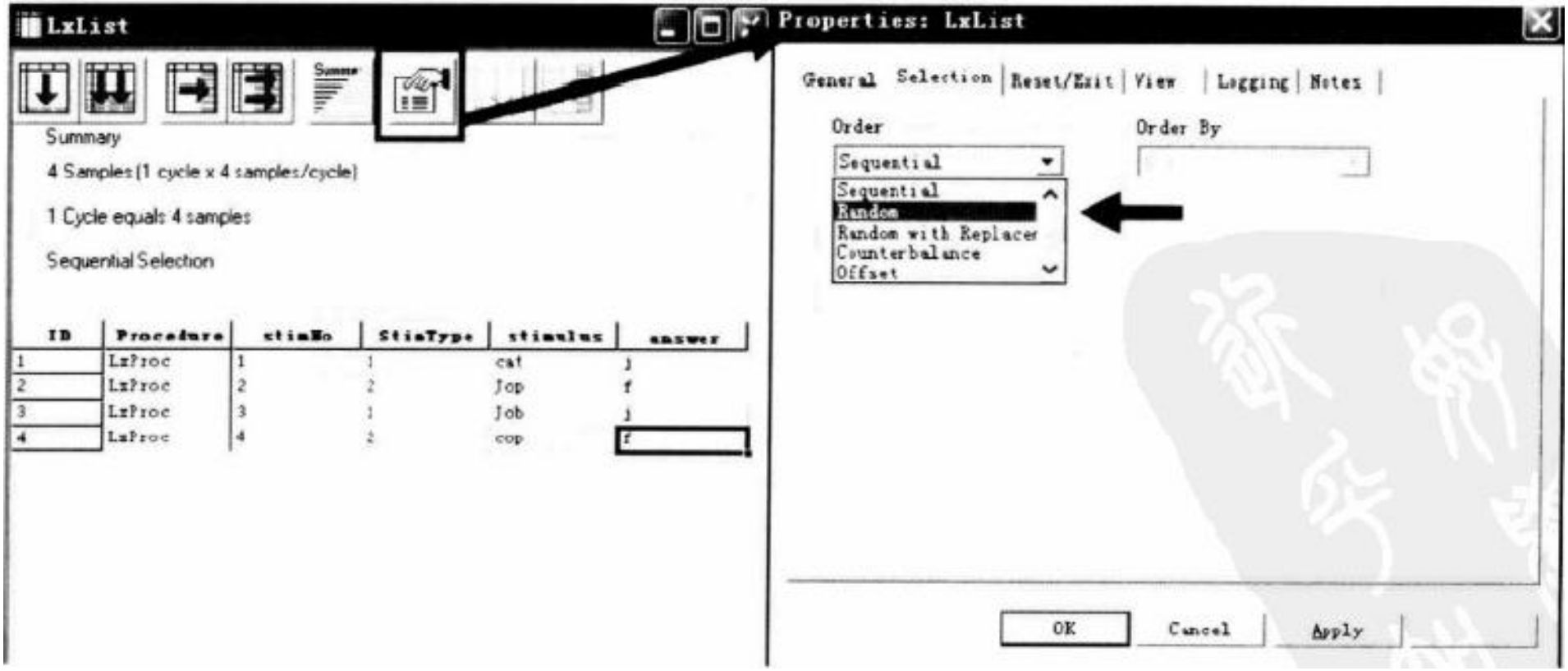
（五）在list控件中输入刺激材料、属性等控制内容



ID	Weight	Nested	Procedure	StimNo	StimType	Stimulus	Answer
1	1		LxProc	1	1	cat	j
2	1		LxProc	2	2	Jop	f
3	1		LxProc	3	1	Job	j
4	1		LxProc	4	2	cop	f

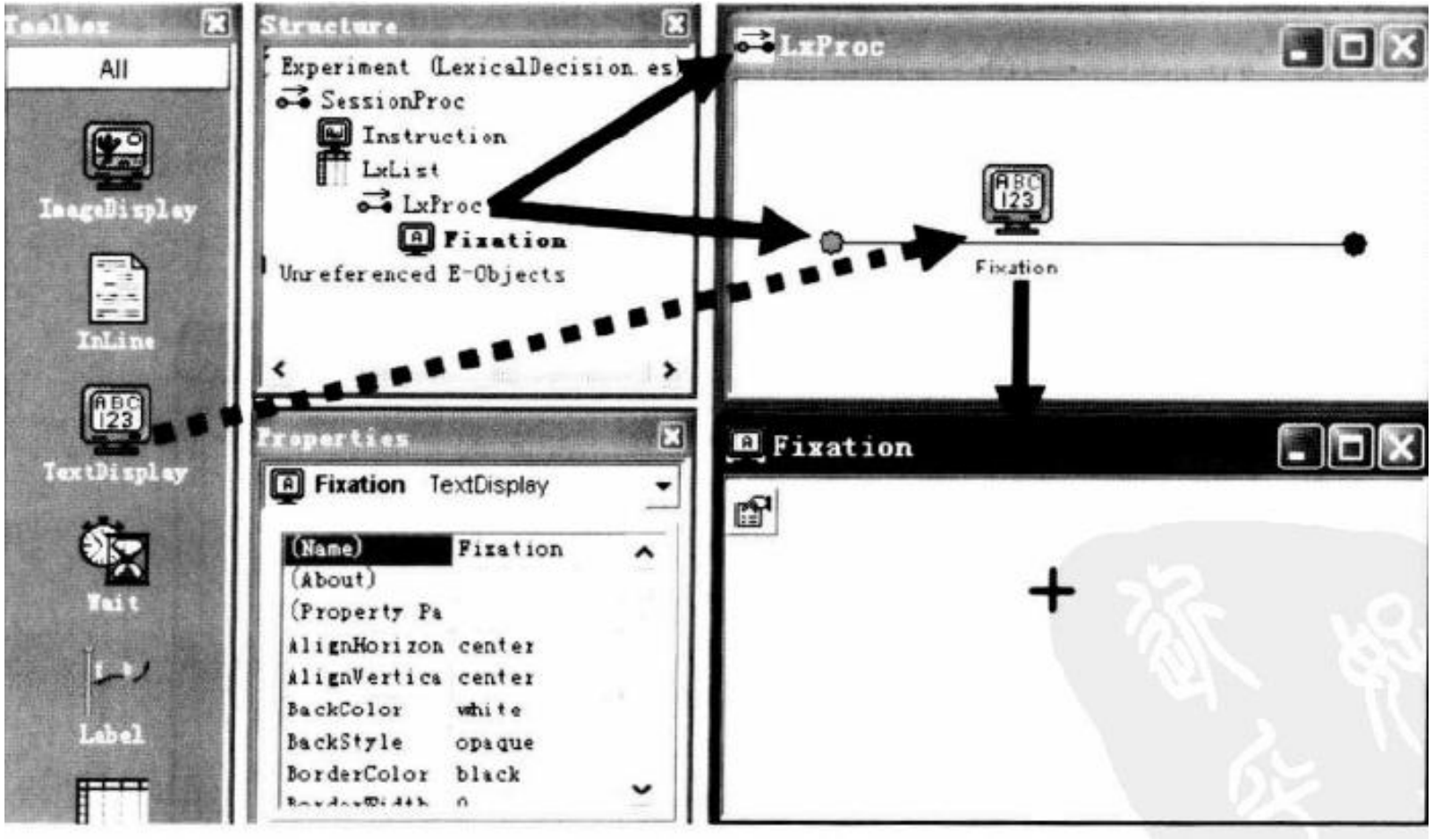

LxList
Summary
4 Samples (1 cycle x 4 samples/cycle)
Cycle equals 4 samples
Sequential Selection
ID
Weight
Nested
Procedure
1
1
LxProc
2
1
LxProc
3
1
LxProc
4
1
LxProc
Add Multiple Levels
Enter the number of Levels you would like to
2
OK
Cancel

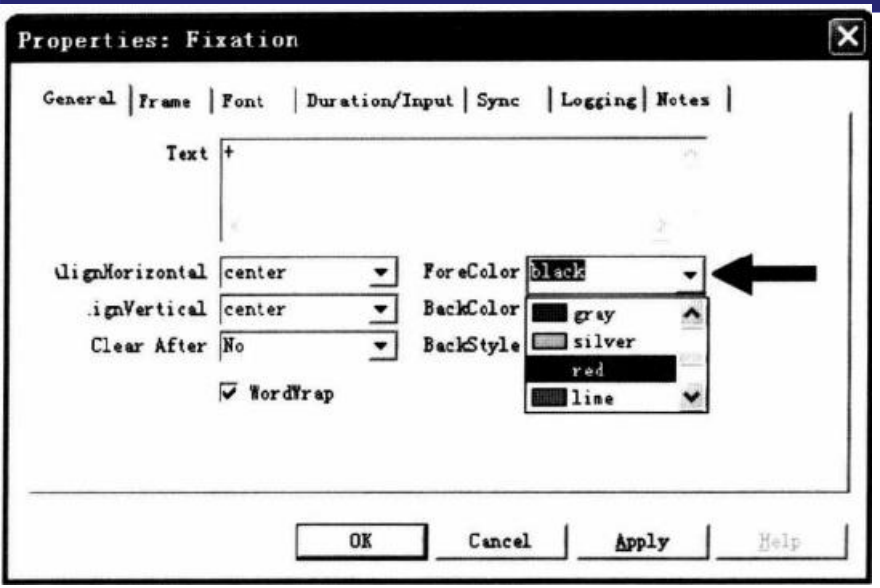

LxList
Summary
4 Samples (1 cycle x 4 samples/cycle)
1 Cycle equals 4 samples
Sequential Selection
Add Attribute
Name
StimNo
Default Value
Add
Cancel
ID
Weight
Nested
Procedure
StimNo
Attribute1
Attribute2
Attribute3
1
2
3
4
LxProc
Add Multiple Attributes
Enter the number of Attributes you would like
3
OK
Cancel

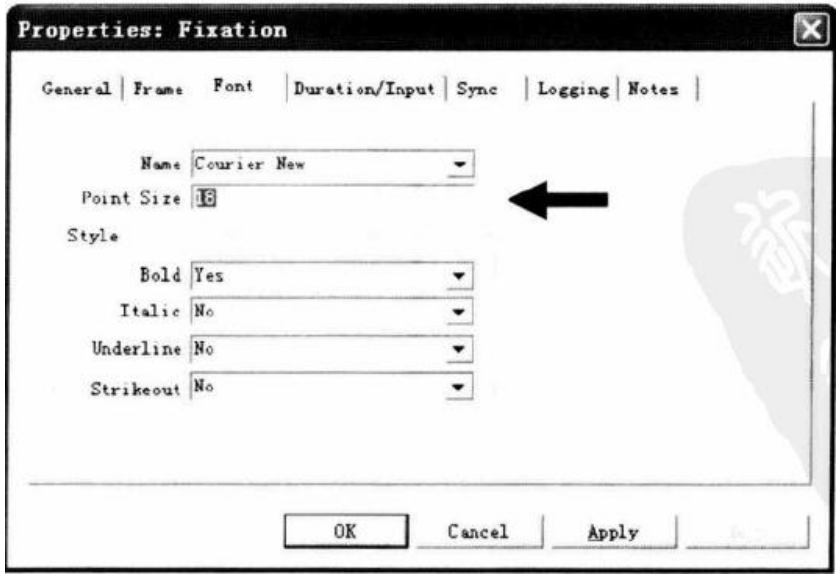

LxList
Summary
4 Samples (1 cycle x 4 samples/cycle)
1 Cycle equals 4 samples
Sequential Selection
ID
Procedure
stimNo
StimType
stimulus
answer
1 LxProc 1 1 cat j
2 LxProc 2 2 jop f
3 LxProc 3 1 job j
4 LxProc 4 2 cop f
Properties: LxList
General
Selection
Reset/Exit
View
Logging
Notes
Order
Order By
Sequential
Sequential
Random
Random with Replacer
Counterbalance
Offset
OK
Cancel
Apply

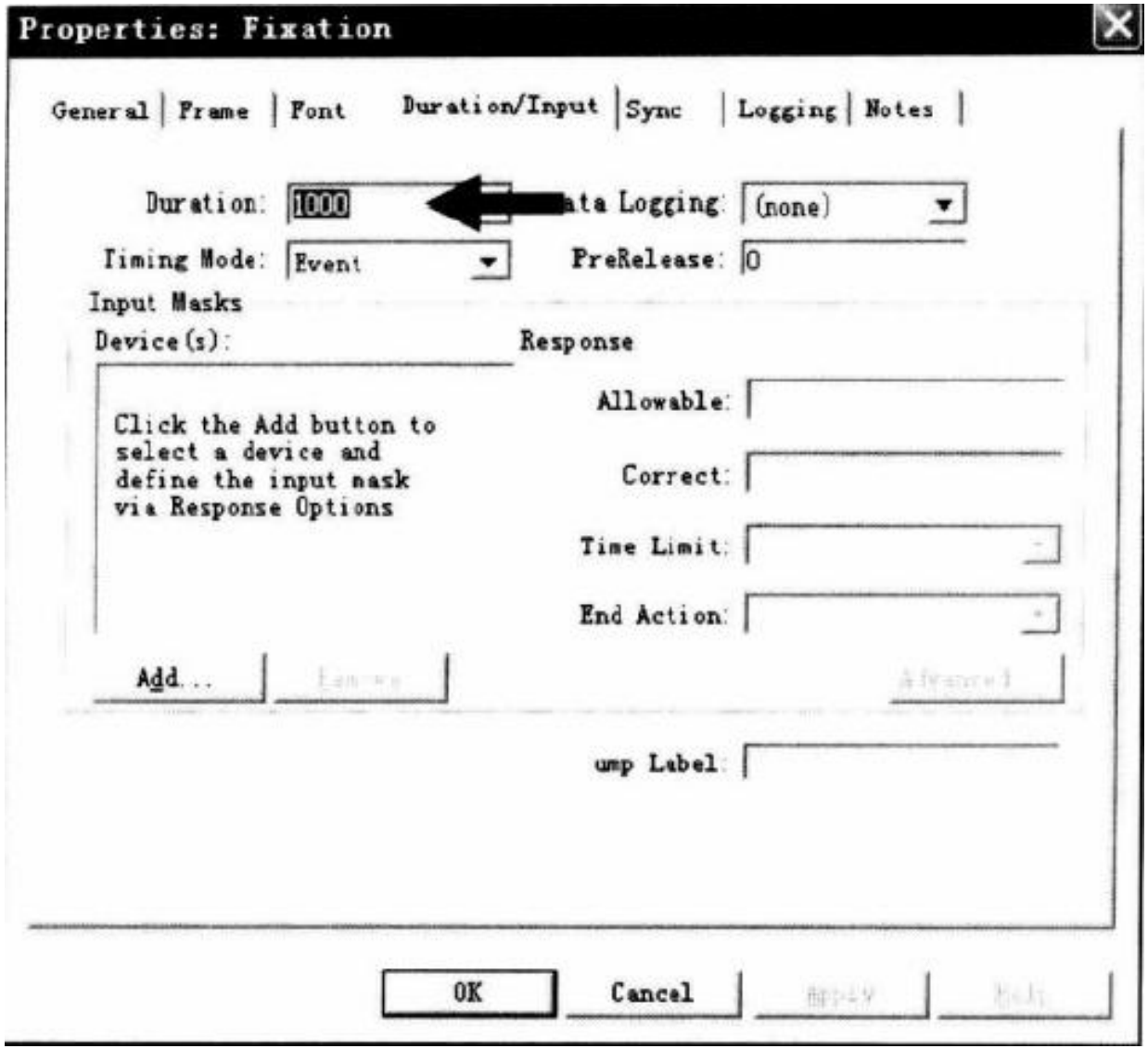
（六）在核心实验过程中创建核心实验过程的各个组成部分，并设置相应的呈现时间、反应方式、需要记录的数据等实验控制的五个要素

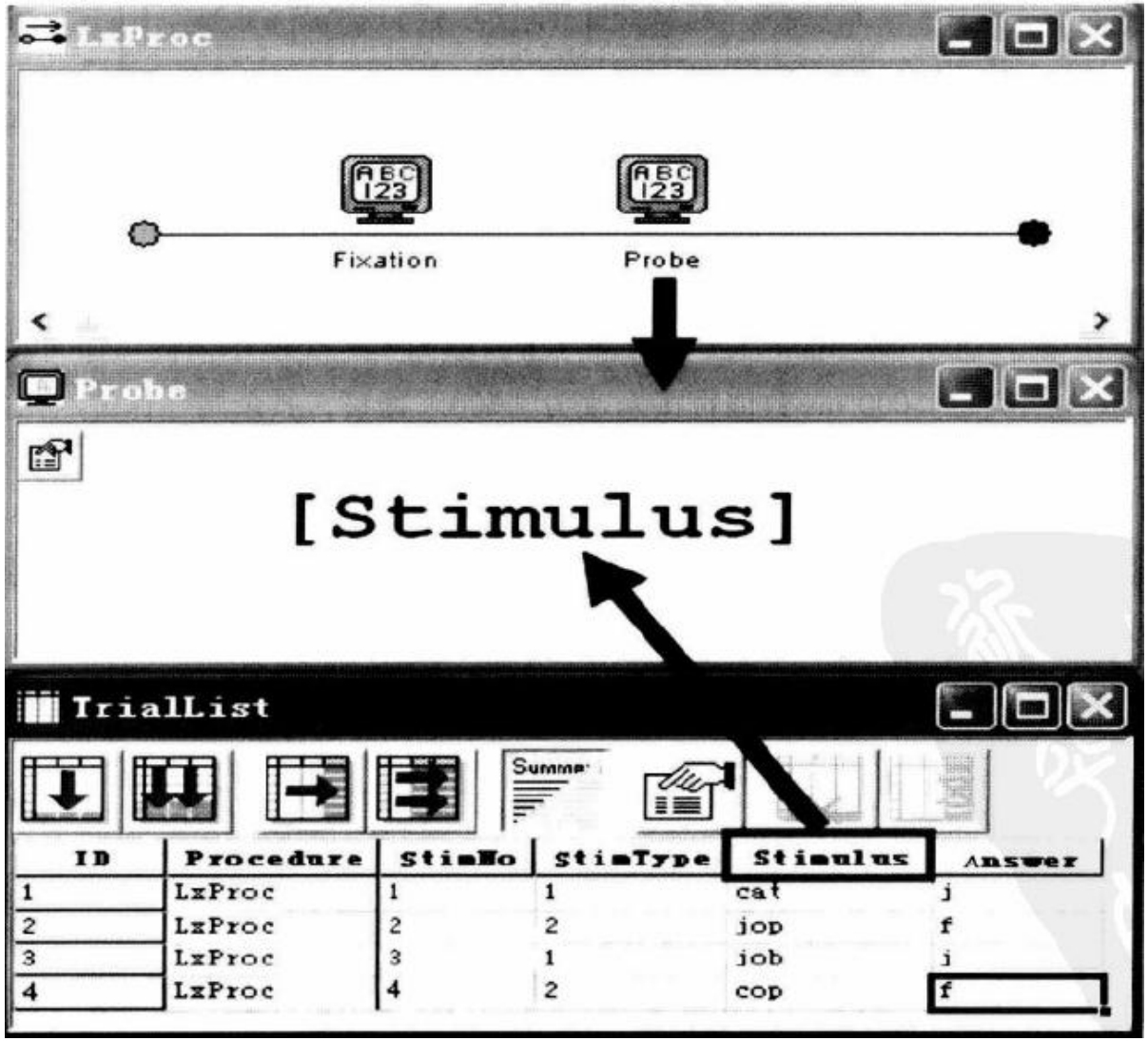
1.注视点


All
ImageDisplay
InLine
TextDisplay
Wait
Label
Structure
Experiment (LexicalDecision.es)
SessionProc
Instruction
LxList
LxProc
Fixation
Unreferenced E-Objects
LxProc
Fixation
Properties
Fixation TextDisplay
(Name) Fixation
(About)
(Property Pa
AlignHorizon center
AlignVertica center
BackColor white
BackStyle opaque
BorderColor black
Fixation

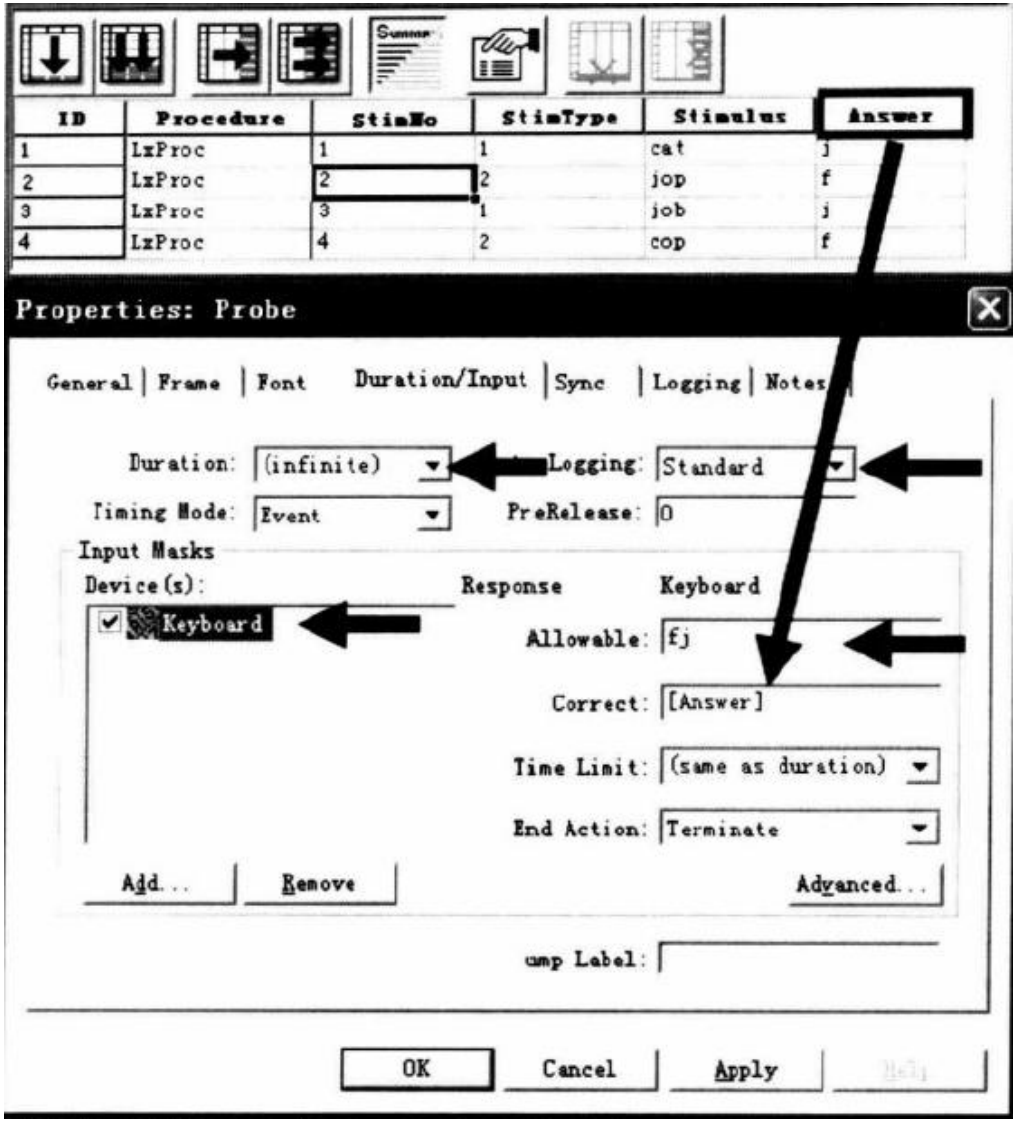

Properties: Fixation
General
Frame
Font
Duration/Input
Sync
Logging
Notes
Text
+
AlignHorizontal
center
AlignVertical
center
Clear After
No
WordWrap
ForeColor
black
BackColor
gray
silver
red
BackStyle
lime
OK
Cancel
Apply
Help


Properties: Fixation
General
Frame
Font
Duration/Input
Sync
Logging
Notes
Name
Courier New
Point Size
18
Style
Bold
Yes
Italic
No
Underline
No
Strikeout
No
OK
Cancel
Apply

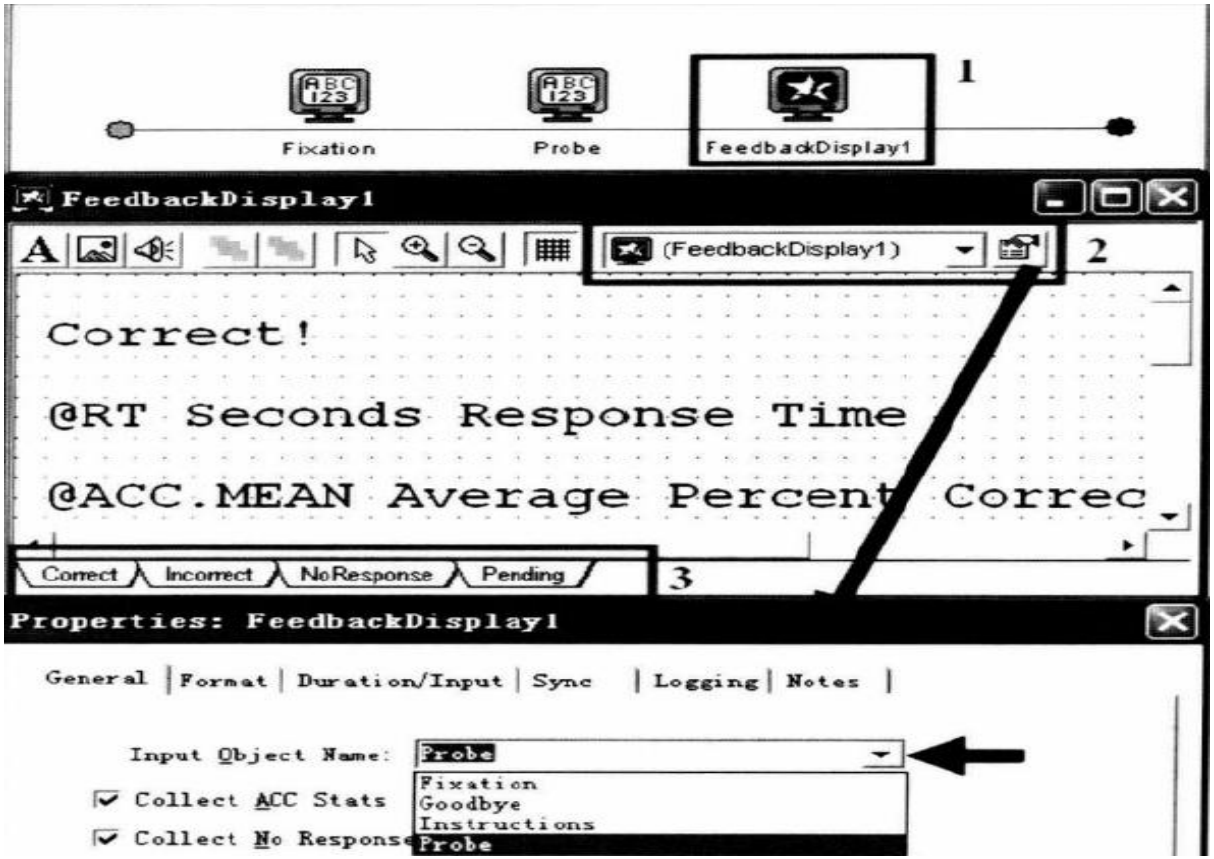

Properties: Fixation
General
Frame
Font
Duration/Input
Sync
Logging
Notes
Duration:
1000
ata Logging:
(none)
Timing Mode:
Event
PreRelease:
0
Input Masks
Device(s):
Response
Allowable:
Click the Add button to select a device and define the input mask via Response Options
Correct:
Time Limit:
End Action:
Add...
ump Label:
OK
Cancel


LxProc
Fixation
Probe
Probe
[Stimulus]
TrialList
ID
Procedure
StimNo
StimType
Stimulus
Answer
1 LxProc 1 1 cat j
2 LxProc 2 2 jop f
3 LxProc 3 1 job j
4 LxProc 4 2 cop f

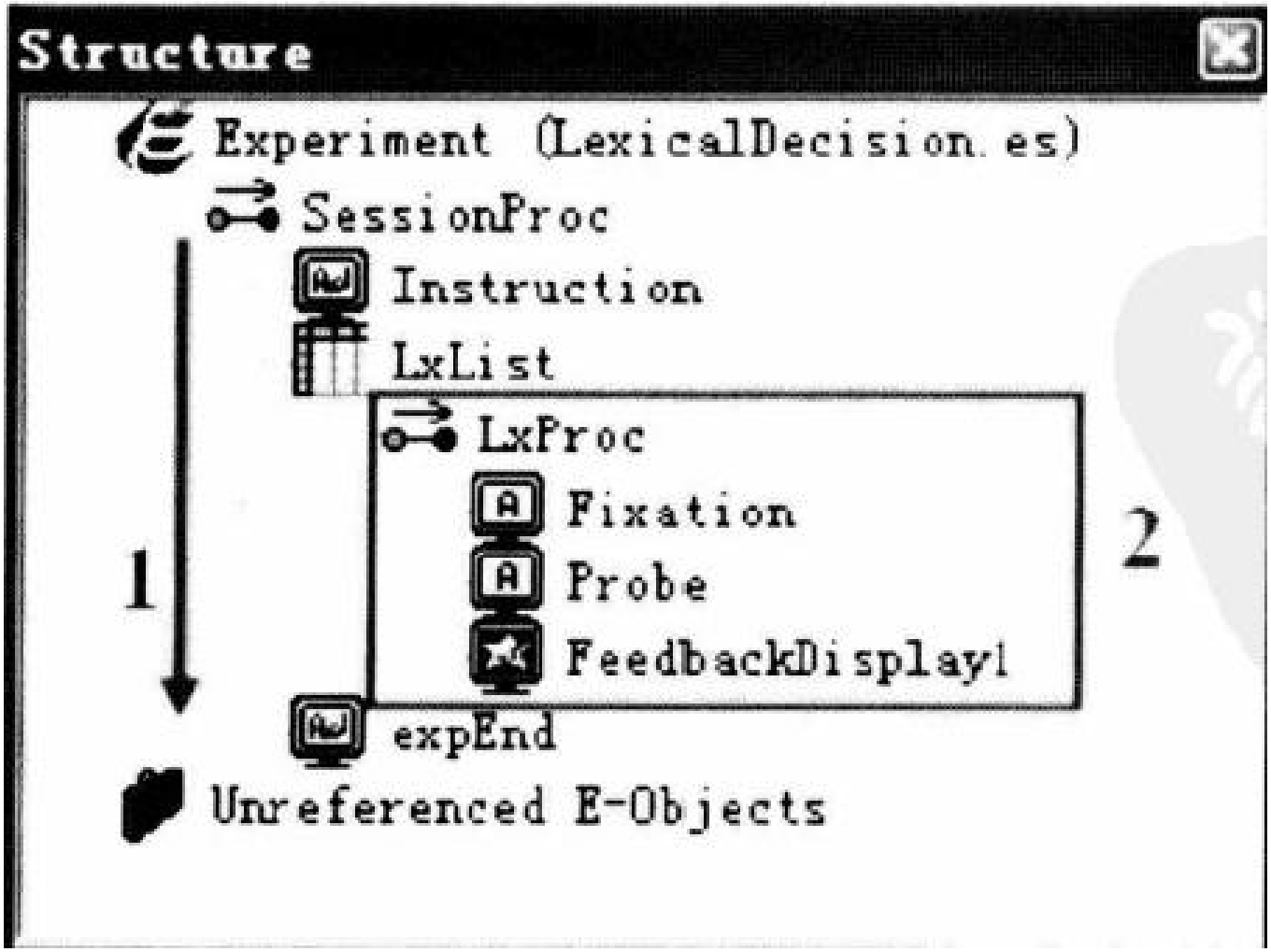
2.探测界面


ID
Procedure
StimNo
StimType
Stimulus
Answer
1 LxProc 1 1 cat j
2 LxProc 2 2 jop f
3 LxProc 3 1 job j
4 LxProc 4 2 cop f
Properties: Probe
General
Frame
Font
Duration/Input
Sync
Logging
Notes
Duration: (infinite)
Logging: Standard
Timing Mode: Event
PreRelease: 0
Input Masks
Device(s):
Response
Keyboard
Keyboard
Allowable: fj
Correct: [Answer]
Time Limit: (same as duration)
End Action: Terminate
Add...
Remove
Advanced...
ump Label:
OK
Cancel
Apply

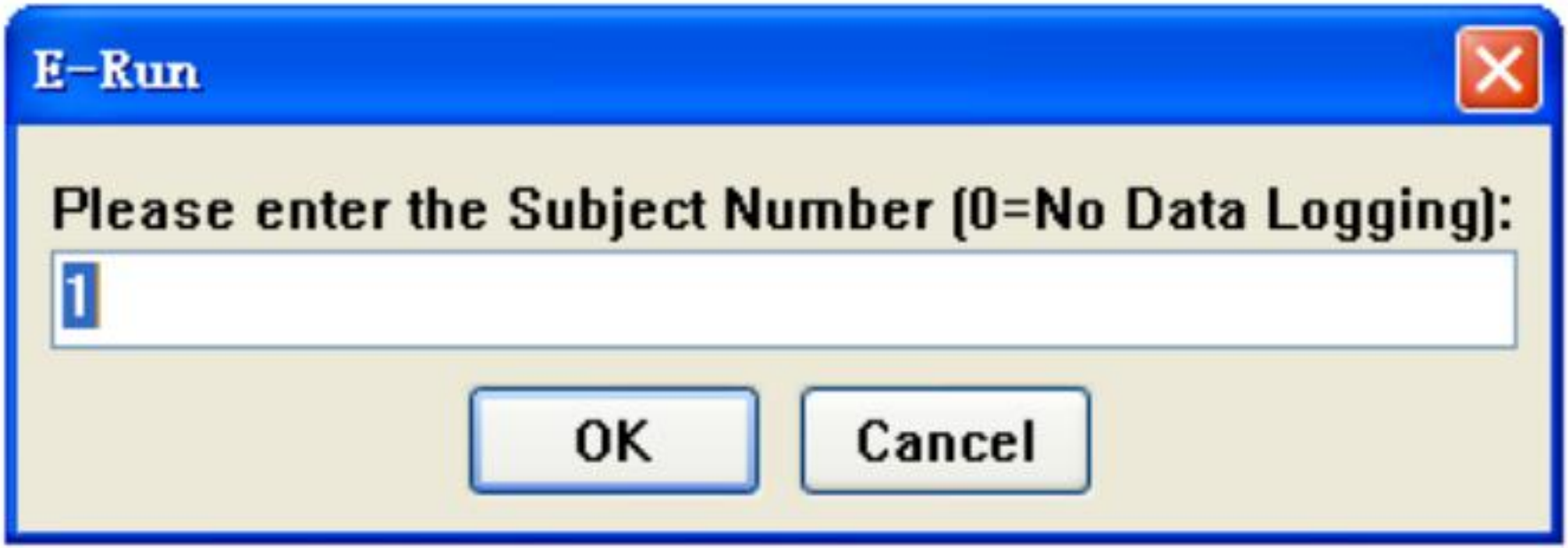
3.反馈界面


Fixation
Probe
FeedbackDisplay1
1
FeedbackDisplay1
(FeedbackDisplay1)
2
Correct!
@RT Seconds Response Time
@ACC.MEAN Average Percent Correc
Correct
Incorrect
NoResponse
Pending
3
Properties: FeedbackDisplay1
General
Format
Duration/Input
Sync
Logging
Notes
Input Object Name:
Probe
Collect ACC Stats
Collect No Response
Fixation
Goodbye
Instructions
Probe

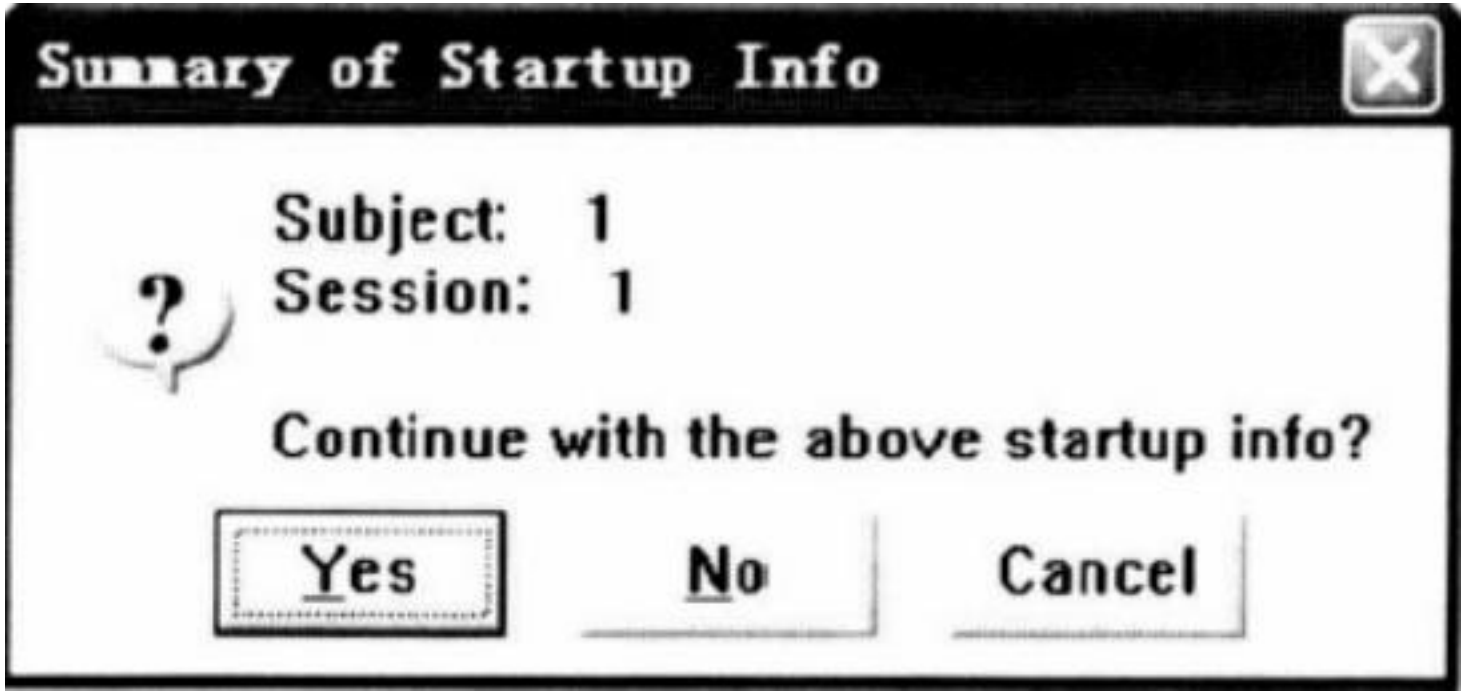
（七）在总过程中SessionProc创建结语


Structure
Experiment (LexicalDecision.es)
SessionProc
Instruction
LxList
LxProc
Fixation
Probe
FeedbackDisplay1
expEnd
Unreferenced E-Objects
1
2

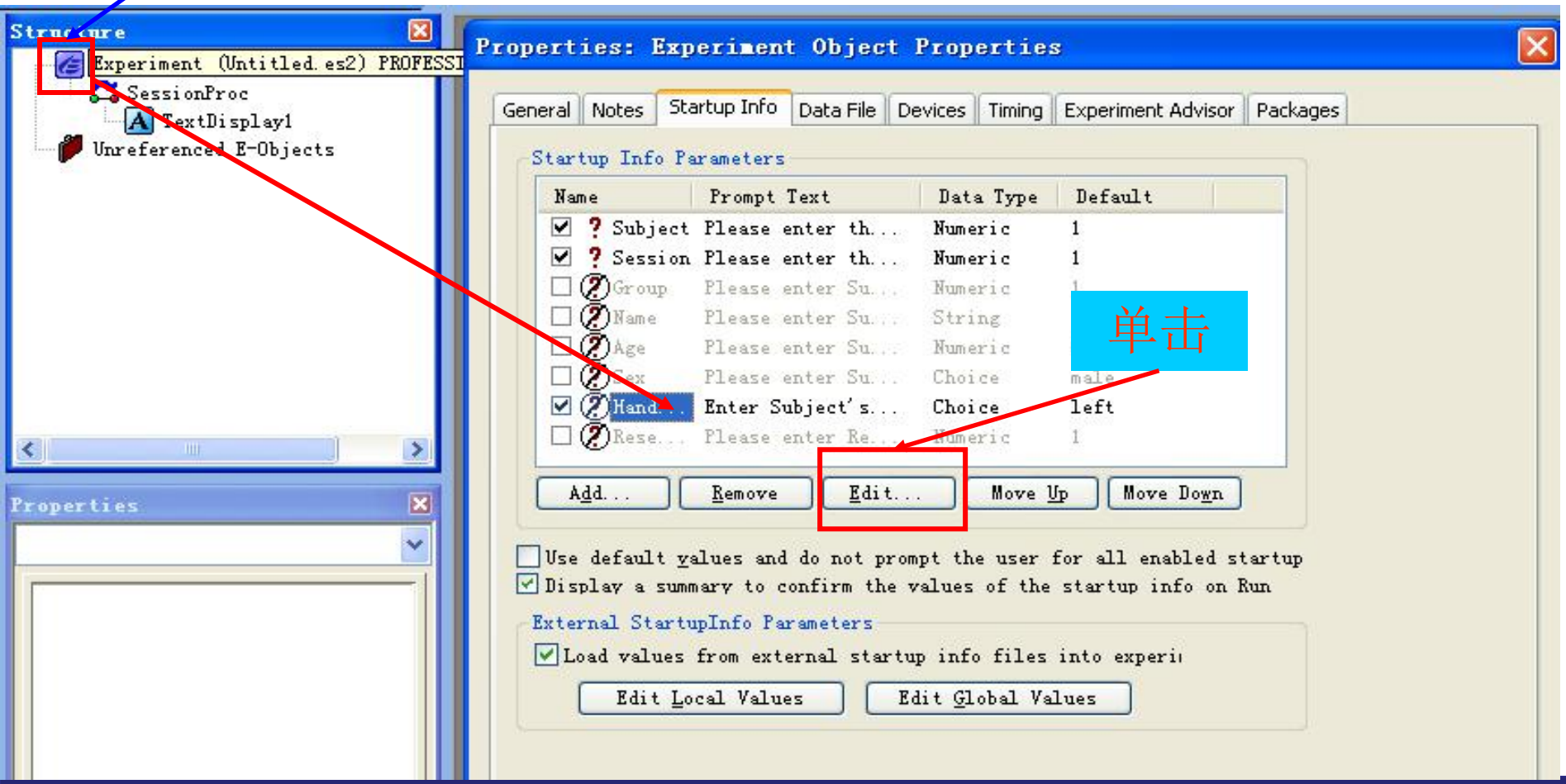
（八）运行、调试和修改程序（多次）直至符合实验要求

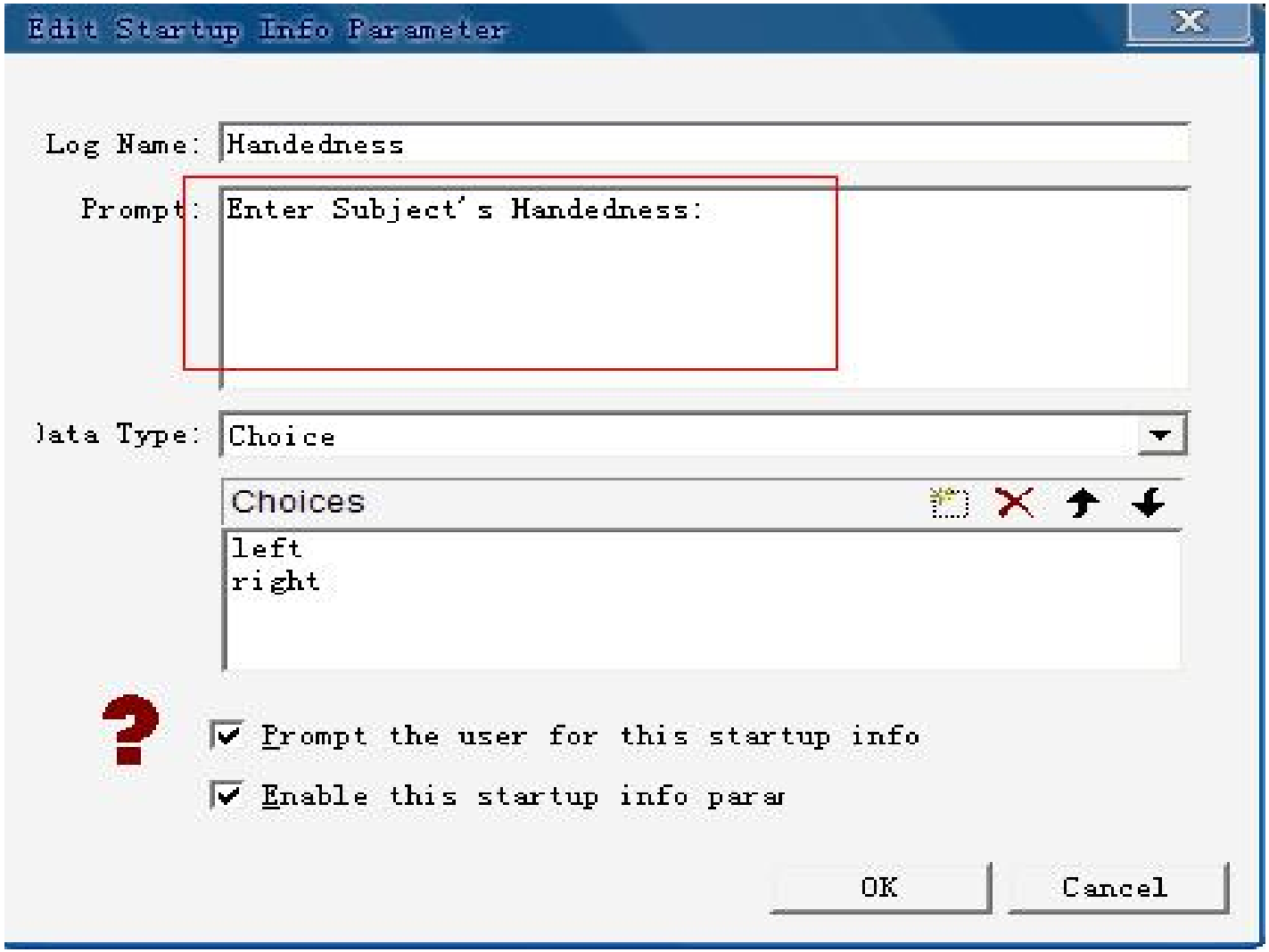


收集被试信息

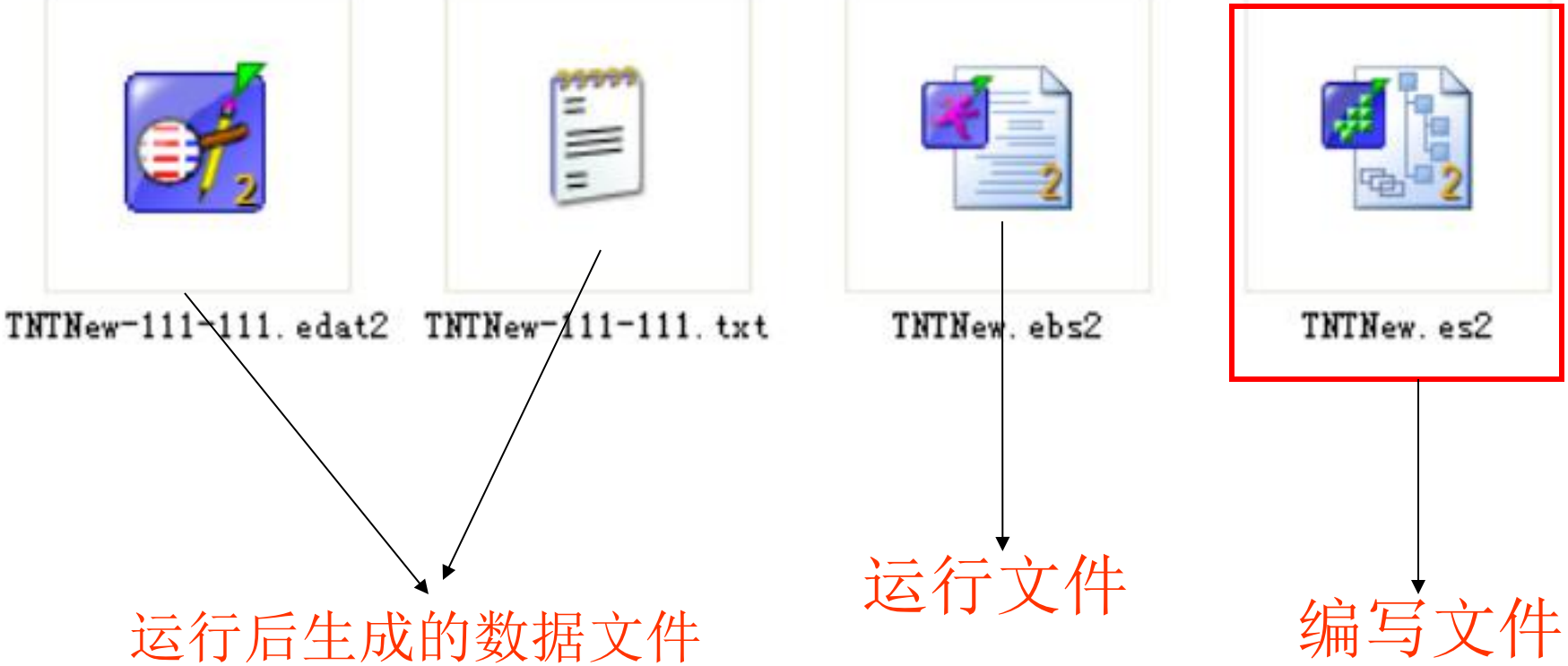

Summary of Startup Info
Subject: 1
Session: 1
Continue with the above startup info?
Yes
No
Cancel

修改被试信息设置


单击
Structure
Experiment (Untitled.es2) PROFESSI
SessionProc
TextDisplay1
Unreferenced E-Objects
Properties
Properties: Experiment Object Properties
General
Notes
Startup Info
Data File
Devices
Timing
Experiment Advisor
Packages
Startup Info Parameters
Name
Prompt Text
Data Type
Default
Subject
Please enter th...
Numeric
1
Session
Please enter th...
Numeric
1
Group
Please enter Su...
Numeric
Name
Please enter Su...
String
Age
Please enter Su...
Numeric
Sex
Please enter Su...
Choice
male
Hand...
Enter Subject's...
Choice
left
Rese...
Please enter Re...
Numeric
1
单击
Add...
Remove
Edit...
Move Up
Move Down
Use default values and do not prompt the user for all enabled startup
Display a summary to confirm the values of the startup info on Run
External StartupInfo Parameters
Load values from external startup info files into experi
Edit Local Values
Edit Global Values

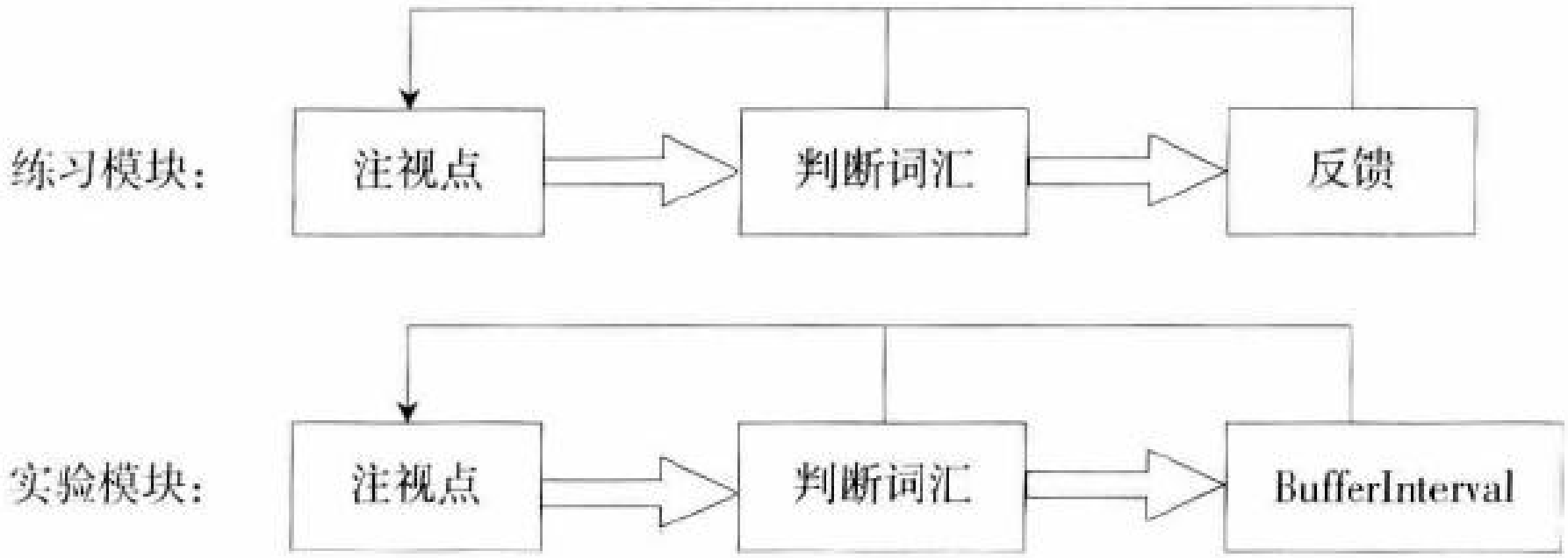

Edit Startup Info Parameter
Log Name:
Handedness
Prompt:
Enter Subject's Handedness:
Data Type:
Choice
Choices
left
right
Prompt the user for this startup info
Enable this startup info para
OK
Cancel

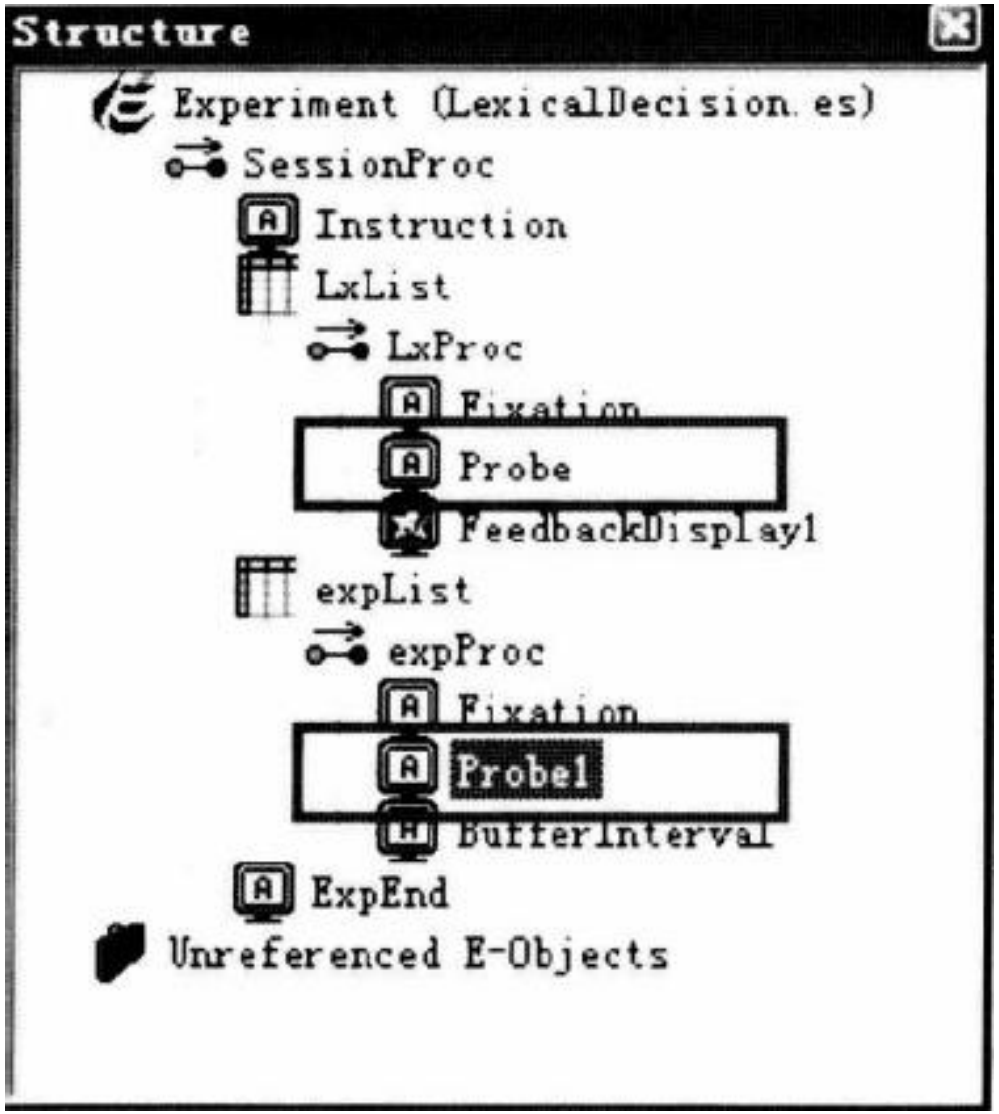
E-prime包含文件


TNTNew-111-111.edat2
TNTNew-111-111.txt
TNTNew.ebs2
TNTNew.es2
运行后生成的数据文件
运行文件
编写文件

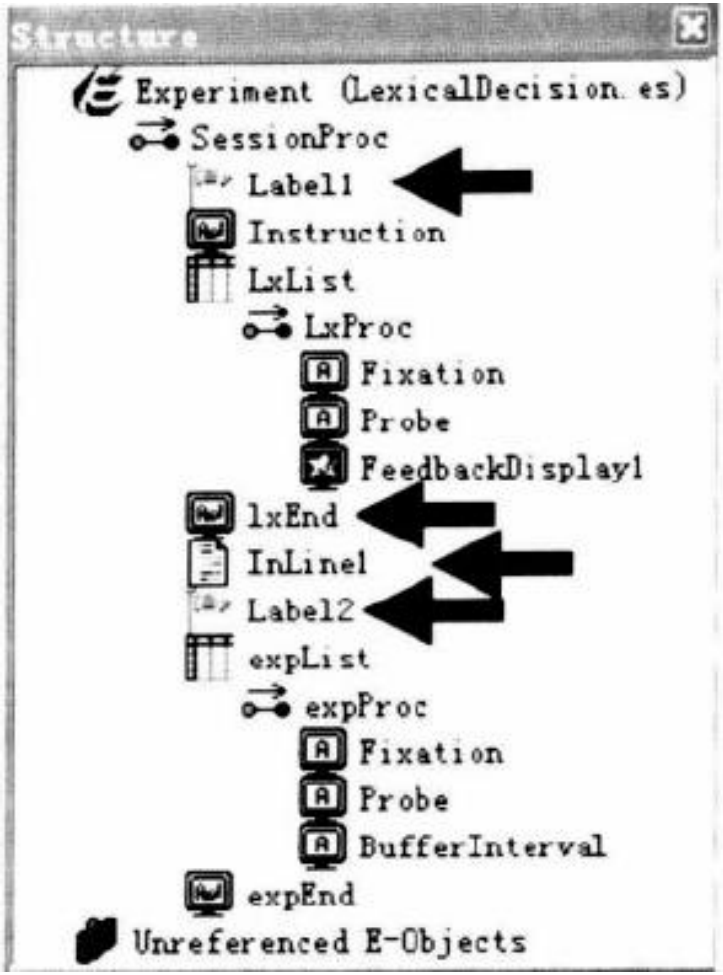
（九）创建实验模块或练习模块

1.实验模块的创建




Structure
Experiment (LexicalDecision.es)
SessionProc
Instruction
LxList
LxProc
Fixation
Probe
FeedbackDisplay1
expList
expProc
Fixation
Probe1
BufferInterval
ExpEnd
Unreferenced E-Objects

2.练习模块与实验模块的过渡设置




```
If lxEnd.Resp="q" then
        goto label1
else
        goto label2
end if
```

（十）编译程序，生成脚本文件，拷贝中文材料、属性等控制内容到脚本文件中，运行实验。

Thank you for your attention!