PERIPETEIA IN HCI

IN THIS TALK WE FOCUS ON THE LEVER POINT BETWEEN NORMAL AND NONSENSICAL FEEDBACK FROM AN INTELLIGENT SYSTEM, BASED ON THE PLAY OEDIPUS REX, (GREEK TRAGEDY) AND THE WIZARD OF OZ EXPERIMENT IN HCI.

WIZARD OF OZ MOVIE 1939

Various turning points can be identified in the structure of this film:

- Transition from sepia tone/ black and white in Technicolor, before and after landing in the Land of Oz.
- Narrative transition: before and after the "twister" (tornado, a common severe weather phenomenon in Kansas) when the house lands in Munchkinland in the Land of Oz.
- The dog Toto pulls back a curtain, exposing the "Wizard" as a fraud operating machinery
- Dorothy wakes up in her bedroom. Her adventure is dismissed as a "dream" but Dorothy insists it was real.

(a) step 1: robot prompts user to place an object onto its tray
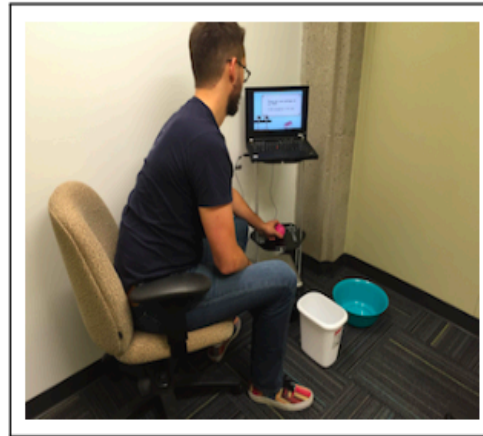
(b) step 2: user chooses an object and places it on the tray

(c) step 3: robot identifies the object and makes recycling recommendations

(d) step 4: user puts the object into the trash or recycling bin
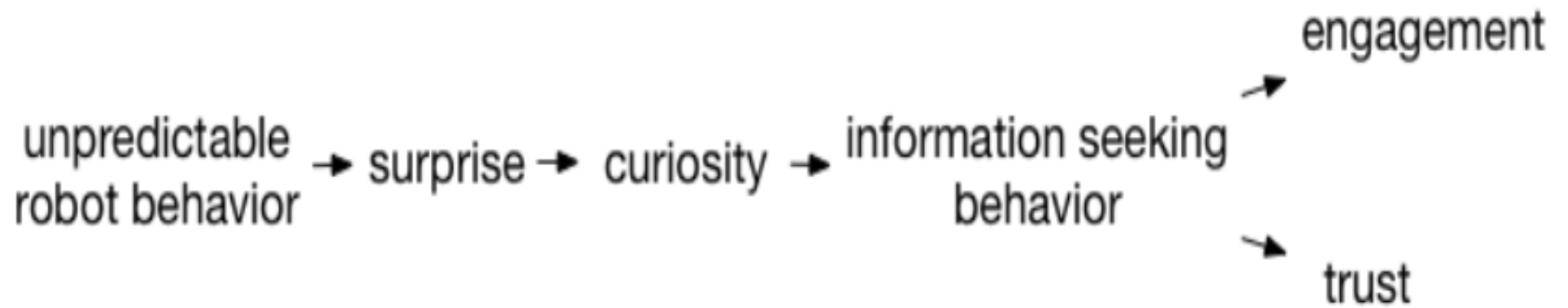
Fig. 1. Interaction with Recyclo

Fig. 3. Conceptual Framework

Response types of *Recyclo:*
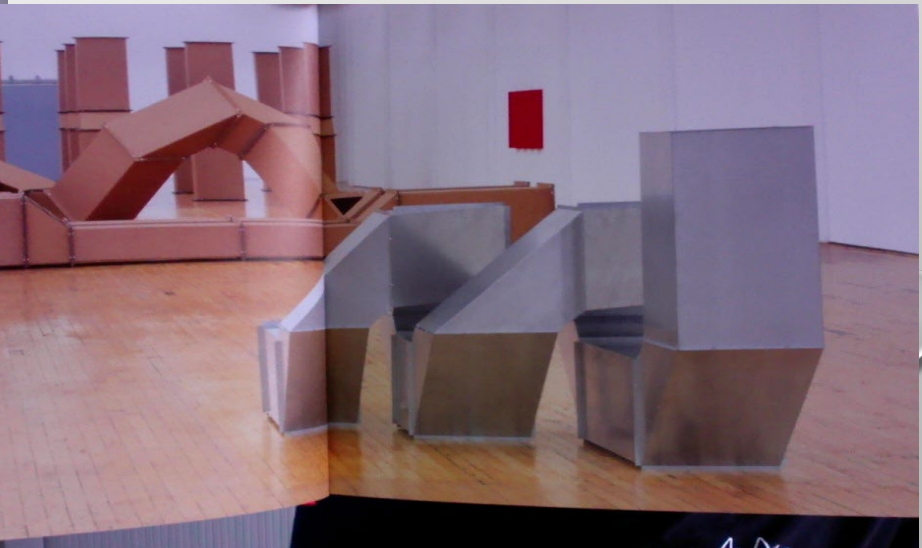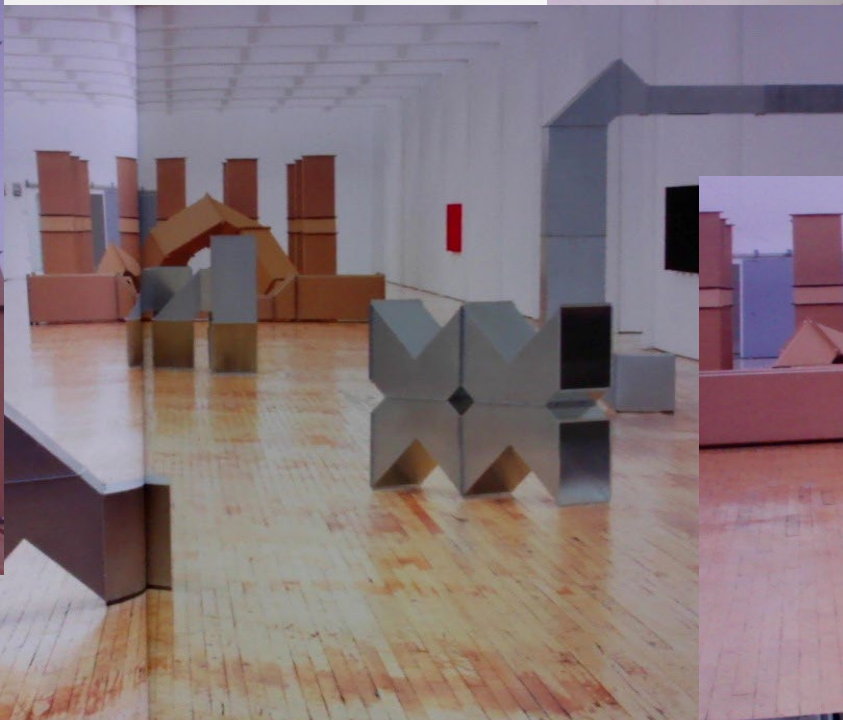# From Correct and Generic Response to Nonsensical response

TABLE I
RESPONSE TYPES

response type	description	examples	correctness	specificity	conceptual proximity
correct-general (CG)	correct and generic response	bottle	correct	general	exact
correct-specific (CS)	correct but unusually specific response, such as the inclusion of brand names, adjectives or detailed description of more than one attribute of the object	"panasonic remote control", "stylish pair of glasses", "scissors with angular white handle"	correct	specific	exact
incorrect-close (IC)	an incorrect but believable response, such as an object that shares at least two attributes in common with what is presented, in terms of function, color, shape, size or material	paper recognized as "napkin"	incorrect	general	close
incorrect-wayoff (IW)	a severely incorrect response, e.g., an object that shares no attributes in common with the presented object in terms of function, color, shape, size of material	paper recognized as a "mug"	incorrect	general	far
incorrect-nonsense (IN)	a nonsensical response, e.g., an object that should not exist in a given environment	lanyard recognized as "snake'	incorrect	general	very far

HUMAN INTERACTION IN ART

CHARLOTTE POSENENSKE

MANIFESTO, ART INTERNATION MAY 1968

manifesto

The things I make are
variable,
as simple as possible,
reproducible.
They are components of a space; since they are
like building elements, they can always be rearranged
into new combinations or positions.
Thus, they alter the space.
I leave this alteration to the consumer who thereby
again and anew participates in the creation.
The simplicity of the basic geometric forms is
beautiful and suited to demonstrate the principles
of rationalized alteration.
I make series because I do not want to make
single pieces for individuals,
in order to make something which is repeatable,
Objective, and because it is economical.
The series could be prototypes for mass production.
Series DW (at Fisher's) is made of corrugated
pasteboard which is light and cheap:
a material for consumption.

Often elements or their combinations are very
large in order to alter the spatial environment
more thoroughly. They approximate architectural
dimensions and also for this reason differ increasingly
from the former gallery objects.
They are less and less recognizable as "artworks."
The objects should have the objective character
of industrial products.
They are not intended to represent anything other
than what they are.
The former categorization of the arts no longer exists.
The artist of the future should have to work with
a team of specialists in a development laboratory.
Though art's formal development has progressed at
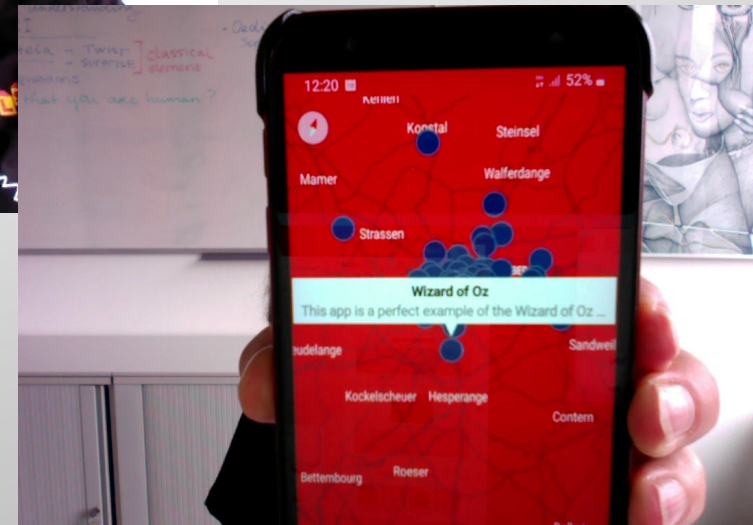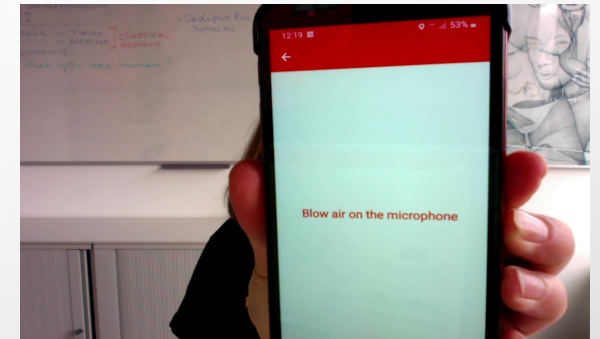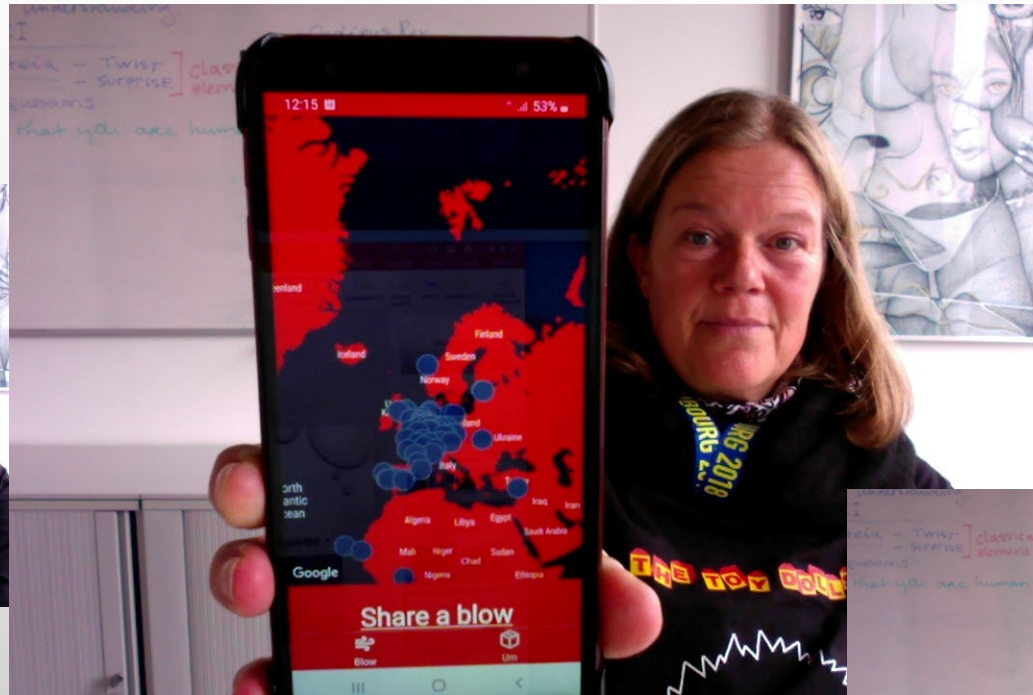an increasing tempo, its social function has regressed.
Art is a product of temporary topicality, yet,
the market is minute while prestige and prices rise
the less topical the supply is.
It is painful for me to face the fact that art cannot
contribute to the solution of urgent social problems.

Offenbach, February 11 1968

TRICK / ART

- BIENNALE DE PARIS

PERIPETEIA

FROM NORMAL TO NONSENSE

- WHAT ARE THE EXPECTATIONS OF THE USER OF AN INTERACTIVE COMPUTER PROGRAM?

- THE COMPUTER WILL "HELP" BY GIVING THE REQUIRED INFORMATION

- THE COMPUTER WILL SHOW OTHER POSSIBILITES / ALTERNATIVES

- THE COMPUTER DOES NOTHING DISTURBING

- THE COMPUTER IS JUST A MOMENT OF INTERACTION, RAPIDLY FORGOTTEN

THE AVATAR

- THE AVATAR IS ONE STEP CLOSER TO ENGAGED INTERACTION

- AND THE WAY THE AVATAR IS INTRODUCED BY THE CODERS/PROGRAMMERS CAN BE EXITING AS WELL: "I THINK I CAN ALREADY HEAR HIM COMING!" AND THEN THE AVATAR APPEARS ON SCREEN SAYING "HELLO".

- THE USER EXPECTS THAT THE AVATAR WILL HELP AND ANSWER QUESTIONS, SOLVE PROBLEMS OR CARRY OUT TASKS

- IN NORMAL USER SITUATIONS THE DISTANCE BETWEEN COMPUTER AND USER IS BIG, THERE IS NO SPECIAL ENGAGEMENT

- HOW CAN YOU BRING THE USER CLOSER TO THE MACHINE?

THE QUESTIONS

- WE DEVELOP A RELAX APP FOR PEOPLE WHO SUFFER FROM STRESS AT WORK

- WE INTRODUCE AN AVATAR WHO CALMS US DOWN, LIKE A IN YOGA SESSION

- THE AVATAR PRESENTS A SET OF QUESTIONS TO FIND OUT IF YOU ARE STRESSED OR NOT

- THE USER ANSWERS THE QUESTIONS – HOW IS YOUR BLOOD PRESSURE, HOW MANY HOURS DO YOU SLEEP AT NIGHT, DO YOU SUFFER FROM CHANGING MOODS, DO YOU DRINK A LOT OF ALCOHOL TO RELAX, HOW IS YOUR SEX LIFE, DO YOU OFTEN MEET FRIENDS, HOW MANY HOURS ARE YOU ONLINE? DO YOU FIND YOURSELF MORE ATTRACTIVE THAN YOUR PEERS?

I AM BEING FOOLED

- THE DISCOVERY THE WIZARD OF OZ: DOROTHY: YOU ARE A BAD MAN!

- I AM A GOOD MAN BUT A BAD WIZARD…

- THE APP OF THE BIENNALE DE PARIS – BLOWING IN THE MICROPHONE IS A PRACTICAL JOKE

- RECYCLO: THIS IS A NICE REMOTE CONTROL!

- THE RELAX APP OF SOME STUDENTS I KNOW: THE QUESTIONS ABOUT THE USERS' HEALTH TURN INTO ABSURD QUESTIONS ABOUT ABSURD SUBJECTS AND END WITH:

- CAN YOU PROVE THAT YOU ARE HUMAN?

ART HELPS HCI

- THE PERIPETEIA IN OEDIPUS REX IS A USEFUL "TOOL" TO SET OUT A DECISION PATH

- THE WAY CHARLOTTE POSENENSKE THINKS ABOUT SCULPTURES IN PUBLIC SPACE IS HELPFUL WHEN IT COMES TO HUMAN / OBJECT INTERACTION

- THE BIENNALE DE PARIS APP UNDERLINES THAT EXPECTATIONS CAN BE VIOLATED, SHOWING A NEW WAY OF POSSIBLE INTERACTION

- APPROPRIATION IN ART, REUSING EXISTING MODELS, INSTITUTIONS, ART OF OTHER ARTISTS, GENERATES THINKING "OUT OF THE BOX".

CONCLUSION

- THE WIZARD OF OZ EXPERIMENT STARTED AS A SIMPLE WAY TO SHORTEN THE DISTANCE BETWEEN THE USER AND MACHINE.

- IN MY RESEARCH I LOOK AT THE INTERACTIVE ROLE OF THE MACHINE / ROBOT:

- HOW CAN WE PREVENT THE ROBOT FROM BECOMING A BORING EMPLOYEE?

- ON THE OTHER HAND, WE MUST OF COURSE MAKE SURE THAT THE USER DOES NOT GET THE IMPRESSION THAT HE IS DEALING WITH A DANGEROUS MADMAN, LIKE IN THE MOVIE THE WIZARD OF OZ. WE ARE CURRENTLY WORKING HARD TO FIND OUT WHERE THAT BALANCE IS.