



1924 - 1933, series of experiments conducted at Hawthorne Works of Western Electric Company to improve worker productivity, in collaboration with Elton Mayo and Harvard Business School

Western produced the electrical parts for AT&T

one of the key experiments was in a specially created room where a small team off female assembly workers were monitored and tested on different working structures, rest breaks, etc

Mayo's interpretation of the results was very much geared towards confirming an ideological view that society was best governed by an elite managerial class and that workers' grievances were irrelevant and that workers were unable to articulate or determine how their own situation could be improved, this was later backed up by a more statistically based report by Thomas North Whitehead (son of British philosopher Alfred Whitehead).

Mayo, *The Human Problems of an Industrial Civilization*, New York; Macmillan, 1933

Whitehead, *Leadership in a Free Society: A Study in Human Relations Based on an Analysis of Present-Day Industrial Civilization*, Cambridge, Mass; Harvard UP, 1936

Whitehead, *The Industrial Worker: A Statistical Study of Human Relations in a Group of Manual Workers*, 2 vols., Cambridge, Mass; Harvard UP, 1938

legalisation of capitalist practice (Negri)

intensification of communication amongst workers, extends into society - biopolitical regimes (Foucault)

"In the factory code, the capitalist formulates his autocratic power over his workers like a private legislator ... This code is merely the capitalist caricature of the social regulation of the labour process which becomes necessary in co-operation on a large scale and in the employment in common of instruments of labour, and especially of machinery." - Marx, *Capital* 1. p. 549 (260)



Figure 4. Relay assemblers, relay assembly test room, 1927. In the foreground are the chutes through which the completed relays pass into the boxes below. The measuring equipment is on the bench in the rear. The workers are, from the left, Anna Haug, Wanda Blazejak, Theresa Layman, Irene Rybacki, and Adeline Bogatowicz. Courtesy of AT&T Archives.

E: "Yes. Did you ever see anything so crazy? Do you remember how he slapped her and how she ran over on the davenport screaming and kicked her legs up in the air, and remember how at the end of it she ran out of the room screaming like she wasn't to blame at all and he was all to blame? Gosh, have I described that scene to all of my friends! Remember how she was standing in front of the victrola like this?" (Employee poses, but it's hard to tell what she means.)

I: "You mean when she's dancing?"

E: "No, when she's standing there like this."

I: "Do you mean before she broke the record?"

E: "Gee, I thought I'd die when she broke the record! Remember how he was coming toward her and she was standing there trying to protect that wonderful record and then how she cried over it and then broke it on his head?" (Gosh, you know that was a regular slapstick comedy, wasn't it?)

I: "It was, wasn't it?.....How did you like Norma Shearer's clothes in that?"

E: "Let's see.....I think that negligee she had on in that scene was wonderful, don't you? That was one of the best looking things she wore."

I: "Someone else asked me about that too and you know I can't remember it."

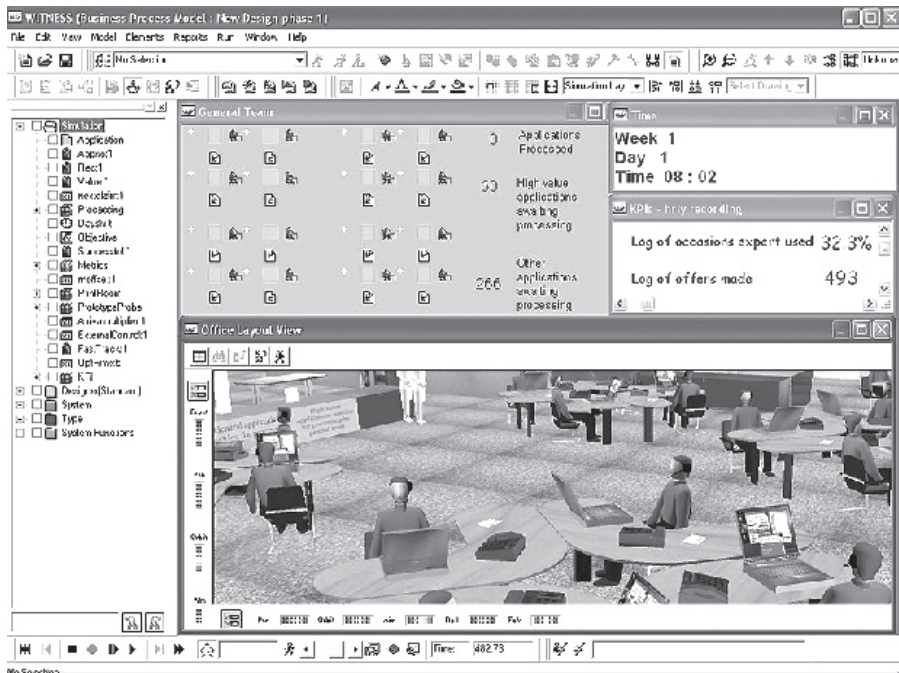
E: (surprised) "You can't remember that? It was really stunning when she sat there on the davenport.....Let's see, I can't remember right away what she wore. Oh, do you remember that scene where she was powdering up? Those undies she had on were awfully cute.....Do you remember that evening dress she wore with a little bit of fur in the back? She wore that when they had dinner together on the porch. Say, you don't remember much about the clothes, do you? (laughing)" (Interviewer has been shaking her head.)

I: "I don't seem to. I guess I do remember that dress now that you mention it."

E: "I thought that was pretty good looking, and then don't you remember at breakfast and when they were going away - I didn't like the hat she wore then, but that dress she had on was good looking. (Dress was tailored. In last interview employee expressed preference for plain tailored clothes, but apparently she paid less attention to them in the movie than to the very feminine things.)

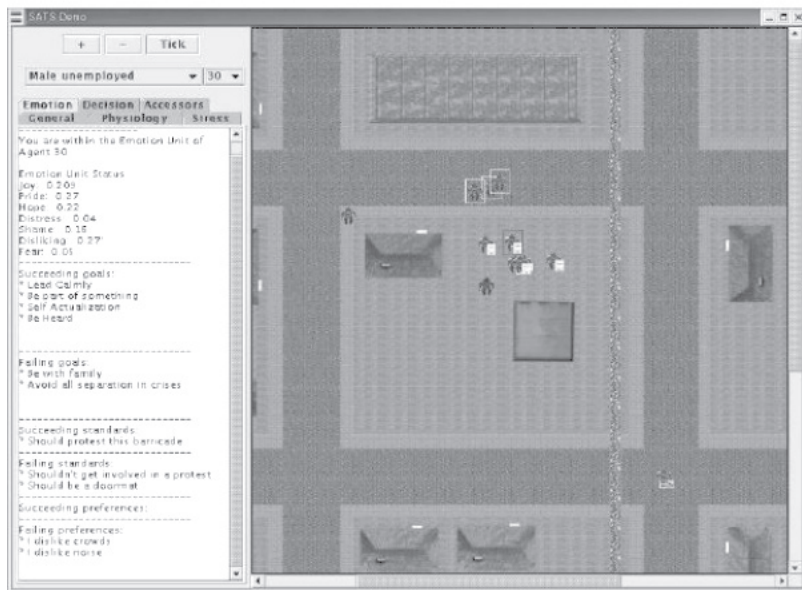
“The human elements of the system must be capable of responding to each other’s activities and to the behaviour of the system’s environment either as the result of direct observation or by receipt of relevant information from those who have observed it. hence, communication holds the parts of the system together and keeps it in contact with its environment. control -

The system must be capable of evaluating its own performance relative to its objectives and of changing itself so as to improve its performance. Therefore, it must be capable of modifying its own content, structure, communications, and even controls in order to better to approximate its objectives. In short, the system must be adaptive and self-organizing.” (*A Manager’s Guide to Operational Research*, p.63-64)



“... among the central moral fictions of the age we have to place the peculiarly managerial fiction embodied in the claim to possess systematic effectiveness in controlling certain aspects of social reality. ... Managers themselves and most writers about management conceive of themselves as morally neutral characters whose skills enable them to devise the most efficient means of whatever end is proposed. ... Nevertheless there are strong grounds for rejecting the claim that effectiveness is a morally neutral value. For the whole concept of effectiveness is ... inseparable from a mode of human existence in which the contrivance of means is in central part the manipulation of human beings into compliant patterns of behaviour; and it is by appeal to his own effectiveness in this respect that the manager claims authority within the manipulative mode.” – Alasdair MacIntyre, *After Virtue*, p. 74

Figure 4 – Screen Shot of the Protest Scene in the Land of the Havenots Showing Observers on the Road, Picketers Holding Placards, and a Sole Security Agent Facing the Crowd. Also, the Panel on the Left Shows the Detail of the Emotion Layer of One of the Unemployed Male Picketers



MacIntyre: “[simulation of Vietnam war by Jeffrey S. Milstein and William Charles Mitchell, 1968 - failed to predict Tet offensive] What they ignore is the necessarily open and indeterminate character of all situations as complex as the Vietnam war. There is at the outset no determinate, enumerable set of factors, the totality of which comprise the situation. To suppose otherwise is to confuse a retrospective standpoint with a prospective one. To say this is not at all the same as saying that all computer simulation is valueless; but what simulation cannot evade are the systematics sources of unpredictability.” (99)

Exhibit 1. Feedback Concept in Decision Making

