

PROJECT CYBERFOLK (1942)
STAFFORD BEER

PROPOSAL FOR (WHAT BECAME) PROJECT CYBERSYN (1971 – 1973)
(DIGITAL TRANSLATION + ANNOTATION OF THE HANDWRITTEN DOCUMENT)

OBJECTIVE:

- TO STUDY THE SYSTEMS DYNAMICS OF THE INTERACTION BETWEEN GOVERNMENT AND PEOPLE IN THE LIGHT OF NEWLY AVAILABLE TECHNOLOGY SUCH AS TV AND DISCOVERIES IN THE REALM OF PSYCHO-CYBERNETICS
- TO MAKE A CYBERNETIC ANALYSIS OF THE POWER STRUCTURE THAT WOULD BE INVOLVED IN SUCH NEW METHODS OF GOVERNMENT
- TO MAKE SIMPLE EXPERIMENTS IN ENGLAND TESTING THE VALIDITY OF THESE IDEAS
- TO MAKE PRIVATE RECOMMENDATIONS FOR THE CHILEAN SITUATION FOR DISCUSSION

THE MANAGEMENT OF VARIETY IN THE POLITICAL CONTEXT

THE MASSES CONSTITUTE A VAST VARIETY, WHICH HAS SOMEHOW TO BE GREATLY ACCUSTOMED* TO FORM A WORKABLE GOVERNMENT.

+ TYPICAL METHODS:

- FORMATION OF PARTIES
- ELECTION OF REPRESENTATIVES
- DIVISION OF TIME INTO
 - PERIOD OF PRESIDENTIAL OFFICE
 - PERIOD BETWEEN ELECTIONS

THE DECISIONS OF THE GOVERNMENT HAVE LOW VARIETY COMPARED WITH THIS* NEEDED APPLICATION TO THE CASE OF THE INDIVIDUAL CITIZEN.

THEY HAVE TO BE AMPLIFIED, AND IN THE PAST THIS HAS BEEN THE ROLE OF BUREAUCRACY.

TIME CYCLES IN THE PAST HAVE BEEN VERY EXTENDED. IT TAKES A LONG TIME TO CHANGE ONE'S PARLIAMENTARY REPRESENTATIVE; IT TAKES A LONG TIME FOR THE BUREAUCRATIC MACHINE TO GRIND OUT AN ANSWER.

BUT THE SYSTEM MET THE LAW OF REQUISITE VARIETY¹ AND ITS HOMEOSTATIS² (THOUGH SLUGGISH) WORKED.

+ INJECT INTO THIS SITUATION TWO NEW EFFECTS:

- I. I) THE EXPLOSIVE RATE OF CHANGE DUE TO ITS GROWTH OF TECHNOLOGY, THE RISE OF POLITICAL ASPIRATIONS AND THE OUTSIDE WORLD CONDITION
- II. THE AVAILABILITY OF MASS MEDIA OF COMMUNICATION — ESPECIALLY TV

GOVERNMENT NOW COMMUNICATES DIRECTLY WITH THE MASSES IN THE CONTEXT THAT THEY ARE ALSO SUPPLIED BY THE NEW MEDIA WITH A PROLIFERATION OF INFORMATION AND MISINFORMATION ABOUT THINGS — AS SOON AS THEY HAPPEN.

¹ One of W. Ross Ashby's cybernetic laws; proposes that if a system is to be stable, the number of states of its control mechanism must be greater than or equal to the number of states in the system being controlled. Ashby states the law as "variety can destroy variety." In cybernetics, the term variety denotes the total number of states of a system. Stafford more specifically defines it as the total number of *possible* states of a system, or of an element of a system.

² An electronic device built by Ashby in 1948. The Homeostat, being one of the first devices capable of adapting itself to the environment, exhibited behaviors such as habituation, reinforcement and learning through its ability to regain stability in response

to small changes in its environment. The Homeostat illustrated his Law of Requisite Variety — automatically adapting its configuration to stabilize the effects of any disturbances introduced into the system.

LOOKING AT THE OUTSIDE LOOP IN THE DIAGRAM ON PAGE 4, WE SEE THIS EFFECT AS

- MASSIVE AMPLIFICATION
- MASSIVE CHANGE IN PERIODICITY

BUT THE RETURN LOOP DOES NOT CHANGE. THIS SITUATION DISOBEYS THE LAW OF REQUISITE VARIETY, AND DISBALANCES THE HOMEOSTATIC EQUILIBRIUM IN TIME.

THEN IT IS PREDICTABLE THAT THE MASSES, THUS AFFECTED, WILL BUILD UP PRESSURES IN THE SYSTEM THAT CAN NO LONGER BE RELEASED — BECAUSE THE FILTERING CAPACITY CANNOT CONTAIN THE FLOW.

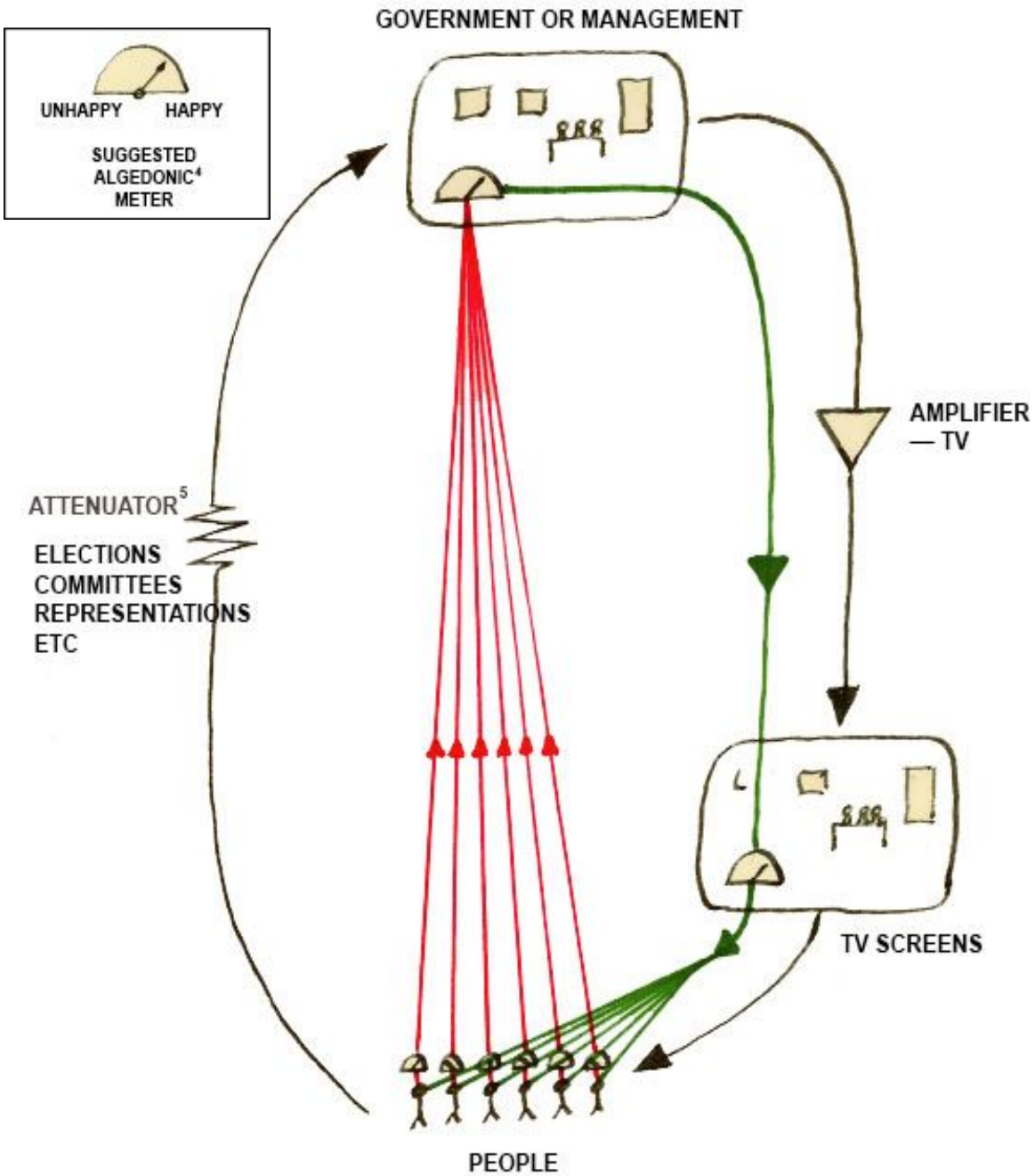
THIS IS BOUND TO LEAD TO DEMONSTRATIONS, AGITATION, PERHAPS VIOLENCE, PERHAPS REVOLT.

IT FOLLOWS THAT THE PEOPLE SHOULD BE PROVIDED WITH NEW MEANS OF COMMUNICATION WITH THE GOVERNMENT WHICH

- MATCH THE AMPLIFICATION OF GOVERNMENT VARIETY WITH LESS ACCENTUATION OF THEIR VARIETY (REESTABLISHING THE LAW OF REQUISITE VARIETY)
- OPERATE ON THE SAME TIME SCALE — THAT IS IMMEDIATE*
- USE TECHNOLOGY TO SERVE THE PEOPLE AS WELL AS THE GOVERNMENT

SEE DIAGRAMS ON PAGES 4 AND 5

³ Involves the filtering of undesirable frequencies. In electrical components, a capacitor is a passive two-terminal electrical component that stores potential energy in an electric field.

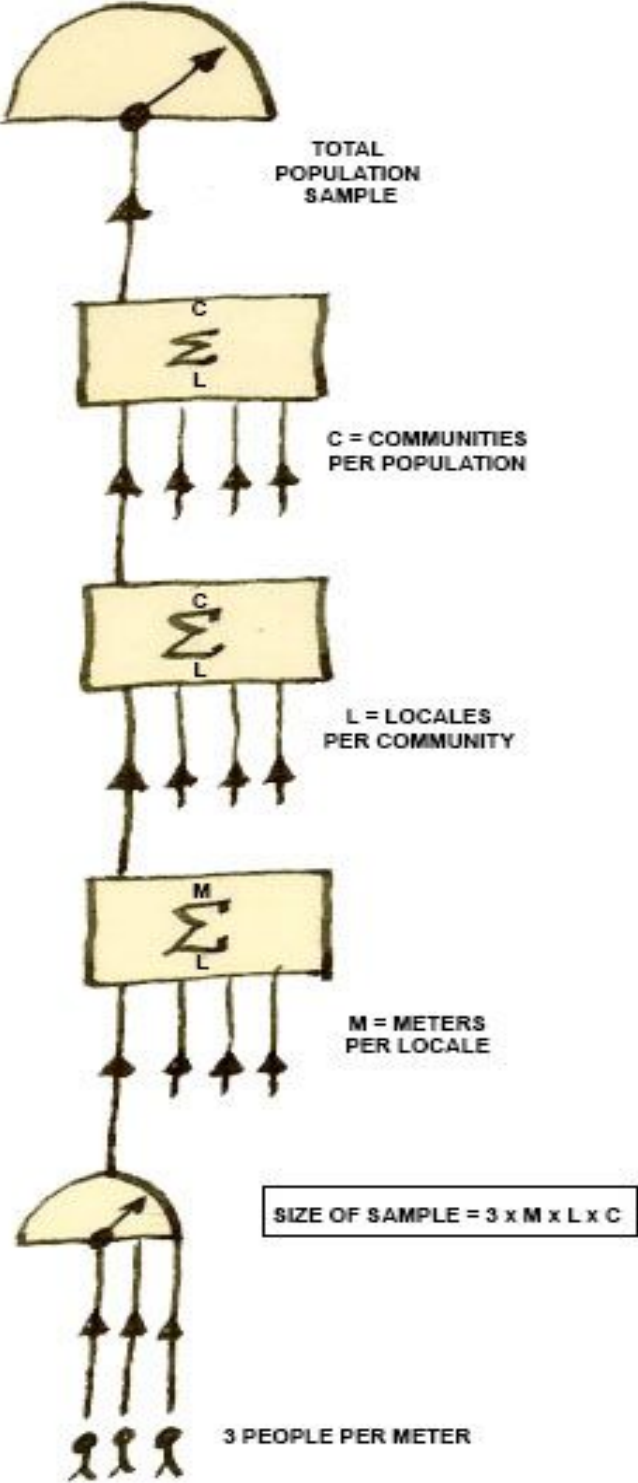


⁴ Pertaining to both pleasure and pain.

⁵ An electronic device that reduces the power of a signal without significantly distorting its waveform. A waveform is depicted by a graph that shows the changes in a recorded signal's amplitude over the duration of a duration of time.

* = UNIDENTIFIABLE WORDS

STRUCTURE OF SAMPLE (USING APPROPRIATE STATISTICAL SAMPLING FRAME)



* = UNIDENTIFIABLE WORDS

THE NOTION OF THE ALGEDONIC LOOP

IN THE DIAGRAM THE INNER LOOP REPRESENTS SUCH A SCHEME. PEOPLE WATCHING TV ARE SEEN COMMUNICATING DIRECTLY WITH THE GOVERNMENT.

THE MAIN METHODS FOR DOING THIS HAVE BEEN:

- PLEBISCITES⁶
- PUBLIC OPINION POLLS
- THE INSTALLATION OF A COMPUTER IN THE INNER LOOP TO RECEIVE PUBLIC REACTIONS ON A LARGE SCALE, PROCESS THEM, AND PRESENT THEM PUBLICLY ON THE SCREEN

ONLY THE MIND OPERATES IN REAL TIME. BESIDES THESE* IN THE SAME OBJECTION TO EACH ONE. THE PRE-EMPT ISSUES BY STRUCTURING THE QUESTIONS; THEREBY:

- PEOPLE FIND THEMSELVES ANSWERING QUESTIONS THEY WISH HAD NOT BEEN ASKED (OR NOT ASKED IN THIS FORM) THEREBY APPEARING TO SUPPORT POLICIES THEY DO NOT ACTUALLY APPROVE
- PEOPLE CANNOT COMMENT ON ISSUES NOT LAID BEFORE THEM
- PEOPLE MAY NOT BE SUFFICIENTLY ANALYTIC OR ARTICULATE TO COPE WITH THIS KIND OF PROCESS
- PEOPLE MAY NOT ANSWER TRUTHFULLY BECAUSE THEY FEAR IDENTIFICATION AND POSSIBLY VICTIMIZATION
- THE WHOLE SYSTEM COULD BE USED AS A GIANT TEACHING MACHINE TO CONDITION THE PUBLIC. ADVANTAGES – SUCH AS CHANGING EATING HABITS TO SUIT THE FOOD SUPPLY – COULD EASILY BE OUTWEIGHTED BY LOSS OF FREEDOM

IT IS A FORMIDABLE LIST OF OBJECTIONS.

AN ALGEDONIC LOOP WORKS ON A NON-ANALYTIC, NON-ARTICULATED SCALE OF 'PLEASURE AND PAIN'. IT USES THE BRAIN AS A COMPUTER, STRUCTURED AND PROGRAMMED BY INDIVIDUALITY, TO PRODUCE AN OUTPUT INDICATING A DEGREE OF SATISFACTION THAT DOES NOT HAVE TO BE 'RATIONALIZED'.

THIS IS AT LAST AN ATTEMPT TO PROVIDE A METRIC FOR ARISTOTLE'S EUDAIMONIA, EUDEMONY, OR 'STATE OF GENERAL WELL BEING'.

SOMEONE HOLDING AN ALGEDONIC METER WOULD SIMPLY SET HIS POINTER* ANYWHERE ON A CONTINUOUS SCALE BETWEEN TOTAL DISGUST AND TOTAL SATISFACTION.

THESE COULD BE AN OFFICIAL LOCALE, HOUSING ONE METER BETWEEN THREE. POINTERS DRIVE A SIMPLE ELECTRICAL* SYSTEM, WHICH SUMS THE VOLTAGE FOR THIS LOCALE. THE REST OF THE STRUCTURE IS SHOWN ON PAGE 5.

NOW: WHEN A BROADCAST IS TAKING PLACE, THE PEOPLE'S EUDEMONY IS INDICATED ON A METER IN THE TV STUDIO – WHICH EVERYONE (THOSE IN THE STUDIO AND THE PUBLIC) CAN SEE. THE STUDIO METER IS DRIVEN BY THE SUM OF THE PEOPLE'S METERS.

⁶ The direct vote of all the members of an electorate on an important public question.

THIS CLOSES THE ALGEDONIC LOOP. IT IS A SYSTEM THAT APPEAR TO RESPOND TO ALL THE CRITERIA NOTED IN THIS PAPER. IT IS PRACTICABLE AND IT IS INEXPENSIVE*

POLITICAL CYBERNETICS

IT IS NOTEWORTHY THAT THIS SYSTEM, SHOWN* OF ITS TECHNOLOGY AND THEREFORE OF ITS FORMAL EXISTENCE, ALREADY TRIES TO BE.

WE THOUGHT IT OUT IN ORDER TO PROVIDE CONVENIENT AND LEGAL OUTLETS FOR PRESSURES BUILDING UP. THESE PRESSURES CONSTITUTE POLITICAL POWER – IN THE LIMIT THEY MAY OVERTHROW GOVERNMENTS.

HOWEVER, THE GOVERNMENT HAS POLITICAL POWER AS WELL; AND IT HAS AMPLIFIERS. A GROUP OF US DISCUSSED WHERE THE POWER REALLY IS FAR INTO THE NIGHT. IT SEEMS LIKELY THAT FURTHER ELABORATION OF THIS MODEL, AND ITS SCIENTIFIC ANALYSIS, WOULD PROVIDE NEW INSIGHTS, QUANTIFIED AND OBJECTIVE STATEMENTS ABOUT POLITICAL ORGANIZATION AND PERHAPS SUGGEST NEW POLICIES.

THIS CERTAINLY NEEDS TO BE DONE, NOT ONLY FOR ITS OWN SAKE, BUT SO THAT THE CONSEQUENCES OF INSTALLING SUCH A SYSTEM CAN BE UNDERSTOOD IN ADVANCE.

THE PROPOSAL

IS THAT I SHOULD DEVELOP THE THINKING OUTLINED HERE. I WOULD LIKE TO BUILD A SMALL SET OF ALGEDONIC METERS TO SEE HOW THEY WORK. I WOULD LIKE TO RUN SAMPLE EXPERIMENTS WITH THEM, SOME WITH CHILDREN, TO SEE HOW GROUPS REACT IN THIS SITUATION, THE PRODUCT OF THE PROJECT WOULD BE A MORE EXTENDED VERSION OF THIS PAPER FOR STUDY AND DISCUSSION. FINALLY, IT MIGHT BE POSSIBLE TO DEVISE AN EXPERIMENT ON THESE LINES FOR WORKER PARTICIPATION IN AN ENTERPRISE, WHERE THE GOVERNMENT IS THE MANAGEMENT OF THE BUSINESS, AND THE STUDIO IS THE OPERATIONS ROOM.

PDF OF ORIGINAL DOCUMENT

<http://s3.amazonaws.com/arena-attachments/928496/dbbd0c10612d316fdb63dabb68581be9.pdf?1489692344>