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PREDICTABILITY AND UNPREDICTABILITY

Part I: General remarks on predictability

Prediction is a familiar part of our everyday lives. We have only to think of subjects as diverse as horse-racing, astrology, or the weather forecast. We feel annoyed when these predictions sometimes turn out to be false - we may have backed the wrong horse, failed to take an umbrella when it rained, and found out that the stars do not govern our lives.

In this essay I would like to examine some aspects of predictability and unpredictability. The Concise Oxford Dictionary defines the act of predicting to "foretell, prophesy". Prophecy need not concern us here as it is outside the scope of this secular enquiry.

Predictability is based on human experience, an individual's a group's or on the experience of a society or set of rules. Predictability is the expectation that we will know in advance what is likely to happen, based on certitudes which have already been established.

Predictability is a positive force that seems to be required by virtue of the condition of life itself. It seems that, faced with the chaos and uncertainty of life in general, human beings use past experience as a guideline to enable them to survive.

Melanie Klein has shown in her work "Envy and Gratitude" the formation of the infant psyche in regard to feeding, particularly as regards its source, the mother's breast. The good breast which supplied milk is not always present when the infant is hungry, therefore it has to be split off as a bad breast to symbolise the absent quality. The onset of hunger and the need for the breast to satisfy the hunger are in the infant's mind one and the same, and only when the expectation of the child that he or she will be fed is he or she able to feel love and gratitude. The feelings for the bad breast create envy, the need to possess and destroy the whole breast, which in turn give rise to persecutory anxieties, a projection of guilt. So the entire well-being of the infant lies in the predictability of the mother meeting expectations.

Mothers everywhere know that the child can predict through routine, for example, the opening of the door to his or her bedroom, the mother's smile and her greeting, the mother's turning towards him or her to satisfy hunger – he or she is thus enabled to see clearly the good and to integrate it. It is in the predictability of the mother's behaviour that the infant finds and forms the ego: in a healthy way if the mother has been reliable and not left him or her hungry, inconsistently, often, or unpredictably. It is the infant's ability to predict the mother's behaviour that gives hope for survival,

for retrieval, integration of the good object, and for love. It helps him or her to become a happy, less fearful, person.

Predictability is necessary to formulate the whole armoury of the psyche, with its needs, wants, desires, ethics, and capacity for love and knowledge. It is the predictability of the mother's response that wins those freedoms for the infant.

Even though predictability may be positive, it is based on a true freedom. Freedom is the absence of intrinsic *necessity* in the performance of an act. It means that, given alternatives among which to choose, one can select without coercion. People freely chose certain behaviour in the past, it had results, and it is likely to occur in the same way if freely chosen again.

Freedom in behaviour does not mean absence of causality, rather that the self is the cause. This in no sense limits his or her choice to behave otherwise. Freedom is often thought of as the mere variability of accumulative behavioural responses, referred to as the standard deviation of a distribution. Human freedom can induce variability, but the presence of variability does not necessarily infer freedom. Awareness, control and deliberation are part of freedom before any action.

Attention must be part of it, too. The awareness that attention is at times under personal control, and at other times is not, is part of understanding the nature of freedom. A free choice is accompanied by the conviction "I could have done otherwise." This is always at the centre of choice. To presume we are not free is the error of determinism.

It is held, in the determinist view, that freedom is a conclusion based on ignorance of causes actually present but *unknown*. In other words, every effect has a cause, and if all causes were known, all behaviour is known. A determinist is someone who goes to the same film or movie twice, but only pretends he or she has been once.

Determinism, therefore, is an argument against freedom, in arguing that the experience of a person is an invalid informational source. It ignores the self and its range of possibilities, because it does not trust the self. How trustworthy is consciousness when consciousness itself is in doubt? A person may experience a phantom limb after the limb has been amputated. The mind is saying in spite of the evidence that the limb is there. How trustworthy is the main cause of behaviour - our own experience as reflected in the mind?

Predictability is not a problem without a solution for the freedom versus determinism argument, which has plagued thinkers for centuries. It has been the way the problem has been perceived that has caused the intractability of the argument. It is possible to choose to act consistently, and thus be predicted to act in a certain way. It is not a cause or absence of cause. A good analogy is that of a motor car where the driver is in control of the steering wheel. At any moment he or she can veer to the left, or to the right, or continue along straight ahead. The idea of the destination is a motive that remains predictable, but the choice of the direction of movement is always there from moment to moment. Predictability is therefore compatible both with freedom and determinism.

Predictability is a central component of science or any scientific experiment, especially in psychology and comes about after the testing of a hypothesis against the observation of objective criteria. The scientific experiment need not include all factors or have knowledge of the complete picture, but it is the consistency of results with the same factors that grants the experiment authenticity.

The assumptions underlying any scientific method are fourfold. First, there is empiricism, which examines the concrete and disallows what is random speculation, superstition and hearsay in the past. The second component, determinism – as we have seen – follows a lawful order and can be linked to causal factors. Behaviour in every surrounding condition must be examined, but as we can see this may mean the exclusion of unknown factors. Thirdly, parsimony which means in this context that complicated and more abstract explanations are ignored in favour of simpler ones. And fourthly, the experiment must be practical.

There is predictability in mathematical equations which means that the questions proposed can predict that the answer will be posed in the frame of the question. Mathematics is predictable on the large scale, but in the infinite scale of the universe there is something which lies outside these laws and is unpredictable. Chaos theory is rather the opposite of the tentacles in a funfair machine: when the mechanical arms are seen readily to encapsulate and bear the entire prize but close, to contain nothing whatsoever visible to the naked eye, so that a change has occurred in the observer, and therefore in the universe, with unpredictable results.

Probability theory is often confused with prediction. Probability is the infinite number of things that can happen divided by the number of choices. Even if there is only one choice, heads or tails when tossing a coin, it is only probable and not predictable which side will be shown, in what sequence, and how often. Probability just tells us how often we may be right over a large concurrence.

Again we have an example of predictable scales in the opinion poll surveys carried out regularly by the newspapers. Even a modest survey requires a carefully pre-tested questionnaire, and looks at a sample of people selected to ensure that they are representative of the population to be studied need an appropriate means of data analysis to ensure that the results are properly interpreted. It is common knowledge that in a survey of 1,000 persons there is likely to be an error of 4%.

Laboratory experiments, based on causal and deterministic data, do not always yield up the truth that the scientist or the psychologist requires.

Part II: *Some Tests for Predictability*

But if predictability is necessary to survival, this does not mean to say that every prediction produces the right results. A number of experiments were carried out some years ago which should warn us that any kind of foretelling has to be treated with proper discrimination and discernment.

In the Rosenham experiment, several people admitted they to mental hospital by describing symptoms which they did not actually have, and staff at the hospital assumed they were insane and treated them as mentally ill even when they were perfectly sane. This was a prediction on the assumption that things were necessarily so, if given certain information.

In the Temerlin experiment, doctors were shown a person being interviewed. The doctors were told this person was psychotic, and later, when interviewing the “patients” had pre-judgemental views and declared them to be psychotic when they had no other evidence for this. The doctors acted on hearsay, or rather seeing was, in their case, believing. Not very much in the scientific spirit!

In the Millgram experiment in New York (1963) an effort was made to discover if the experience of the Nazis in Germany during World War Two could have been predicted by their backgrounds and the propaganda to which they had been subjected. An experiment was set up and a random sample of various nationalities from *very different backgrounds* were told that they were going to take part in a learning experiment: 35% were blue collar, 40% were white collar, and 22.5% were professionals. They were told to administer an electric shock to people who failed to answer the questions properly. There were 30 switches ranging from 15 volts to 450. On being presented with a good motive, i.e., the advancement of learning and science, the vast majority of the subjects administered what they saw as severe electric shocks. (The shocks and reactions were simulated.) In other words, the actions of Germans in war situations were not predicted simply from being German, but could be likened to a general readiness to obey. However, it is probable that many cultures generally punish any behaviour which is not in line with their values and that many people act with cruelty to others, especially if motivated to do so. The experiment proved that this was *predictable irrespective of cultural background*. Of the 40 subjects, 26 obeyed all the way to the end of the shock scale. In this – obedience to repugnant commands – test, psychiatrists were asked to predict how many people would go so far. The psychiatrists thought that only 1 in 100 would behave in this way, and proved again a lower power of prediction on the question of whether, if given a satisfactory motive, the majority of people will act regardless of whether they are causing pain to others.

In attribution theory, very often predictions are made by people on purely situational or personal grounds. Attribution theory is what people consider to be causes in other’s behaviour. They then may predict falsely from a person’s behaviour. A trait is recognised and is bracketed with others. In this way, it is thought, we can predict character. Again, control is the issue. People are thus influenced by expectation,

schemata, colours and information by what they think they see and they are not always politically correct! Hodges has shown us that a negative first reaction is more difficult to change than a positive one. An important experiment carried out in 1974 by Ward, Zanna and Cooper confirmed the hypothesis that prejudiced individuals can interact in ways which actually evoke the stereotypical behaviour. For example, if an interviewer on television is friendlier to whites than to blacks, he will evoke a stereotyped response from the black person. The stereotype is actually reinforced. This is important when we look at television, particularly at advertisements. The fundamental attribution error is to the person, not the situation (the person on television has been paid to say something he or she may not believe) but these people are believed, hence the practice of creating persons in the image of the acceptable, ordinary person. This may have a stereotyping effect on many people who, in turn, can be predicted to actually behave the way the advertisers want them to.

The self-fulfilling prophecy has been demonstrated by Snyder. He arranged for men to talk on the telephone to an unknown woman. There were two groups in the experiment: the first was told the woman was attractive and the second were told that she was unattractive. The first group experienced more positive, attractive, sensitive communication, while the second group were rated as kinder, more genuine, and modest, and altogether more altruistic. Self-fulfilling prophecy is a prediction that is based on definition.

In 1977 Ross found that even passion can be misattributed and depend on a situation. An attractive female approached men on a rickety swaying bridge for help with work in psychology, and when describing the experience later, the men included more sexual imagery than those men who were approached on a safe bridge. It is something Hollywood has known for a long time! Hollywood has also been known to rely on the formula that has a predictable response from the audience, but this does not always work in its favour.

Part III: *Predictability and Mental Illness.*

Normal psychology can provide valuable clues as to how we and others think and act. In the question of mental illness, once a person has been diagnosed as being mentally ill a prediction is made that he or she will be found mentally ill *on all counts*. This may be because mental illness is seen as a kind of dangerous unpredictability that has to be controlled. I have mentioned that many neuroses may have as their root cause a primary unpredictability. This begs the question: What is insanity? Is it merely a diagnosis of unpredictability?

Although the outcome may be that the patient is treated as being out of control and unpredictable, in fact several things are looked at before a diagnosis is made. A doctor

may disregard some abnormal behaviour patterns which are the result of pure stress, for example, a personality or development disorder, a physical cause, such as anaemia can be found, for it produces depression. The doctor may note psychological stressors to take into account, for example, bereavement, perhaps, or a house move, and or how a person's adaptive patterns are coping with stress. Responses to stress can be prediction and include concentration of specific stimuli, poor learning or remembering, concentration on surface elements rather than intrinsic or important things, and panic attacks. But a person who is diagnosed as being mentally ill has to fill five distinguishing and different criteria, viz.:

1) Arbitrary inference A person may jump to conclusions through a cognitive error. There is no focus for what is going on at reality level. This means that the person may look on appearances as causal rather than coincidental.
From the patient's point of view, however, two or more ideas may be present at the same time without the capacity to articulate this. Speech will be therefore seen as unpredictable and disordered. The method in the madness will not be apparent just the madness.

2) Selective abstraction – focuses on negative rather than positive, pays attention to one bad thing

This may indicate that the person has been abused.

3) Over-generalisation – drawing a general inclusion from a single instance

This may be result of fear which becomes paranoia.

4) Magnification or minimisation – the person may refused to acknowledge good things and may refuse credit for positive actions.

This would be the result of extremely low self-esteem, probably because of abuse.

5) Personalisation. Feeling other people's words and actions are motivated by hostility. Even someone doing something nice for them may be interpreted as being hostile.

This shows that trust has been violated.

These remarks I have placed underneath the points are a way of showing that there is causality in mental illness which is not always apparent. The unpredictable behaviour so dreaded by families, nurses, and friends of mental patients in fact is the tortuous path of a neurosis which has not been properly mapped. R. D. Laing developed similar ideas in the 1960's.

People are locked away because very few family members or professionals take the time to unravel the causality and reasoning pattern which underlies the incoherence.

Control is the key issue. All the indices in recovery are based on meeting social norms, making the unpredictable patient behave in a predictable fashion. "The patient behaves well with others" "the patient is improving" (i.e. meeting my expectations as a doctor) these observations are common in reports. The prescribed drugs nearly always act on the patient in a predictable way, so very often the patient's once spontaneous energy is minimised and there is a danger he or she will become institutionalised. The difficulty in dealing with mental illness is the hiatus between understanding the inner experience and being accurate about the chemistry of the mind.

Some useful discoveries have been made. For example, Lithium, a natural substance is effective for about 80% of manic depressives. It helps regulate the transmission rate of messages in the brain, being a substitute for sodium, so that the patient becomes coherent again. . However many of the neuroleptic drugs, while reducing unpredictable thought and action in the patients, have some undesirable physical effects such as obesity, tardive dyskinesia, and inanition. Dreams may be lost, and this may be bad for the patient's general adjustment.

Dr Edward Podvoll in his book "The Seduction of Madness" describes some very severe and famous cases of mania and madness. He relates the illness to an infinitizing of the micro-operations of the brain. He believes that the beginnings of "thought disorder" are born from countless "bodily shatterings". It could therefore be assumed that a severe trauma underlies all mental illness, and since it lies in the past, it is not totally discernible to the observer. Sexual, verbal or physical abuse, are a prelude to madness, as are also subjection to unfair discrimination, being denied personhood, or being persistently badly treated. These can open the door to insanity. This is why family behaviour, background and history are important in the aetiology of mental illness.

Podvoll describes "chasm situations" where the person is literally poised on a chasm, once over the chasm he becomes part of the infinitizing machine, the second state of the illness when the ordinarily silent micro-operations spring to life. They show the molecular structure and the person is then controlled by the minute operations of the brain. These are essentially *unpredictable* and share this quality with sub-atomic physics. The patient can act through inner commands, and this is why the psychiatric profession is so exiguous as regards unpredictability in a patient, as he or she could cause harm to the self, or others.

The question of finding the right drug which has no side effects has spurred scientists and psychiatrists on. However at the moment, there is only the certainty that the patient will die cured. What happens if a piano goes out of tune? The piano tuner tunes the whole piano. He does not add an entirely different note which throws the whole piano out of tune, which is the case with some drugs.

Individual and group therapies are sometimes used alongside drugs, and may prove effective. The difficulty is the process can be very slow-moving and also somewhat unpredictable. Some therapies for example, Rational Emotive Therapy, presume the patient always wants the experience, that women want to be raped or abused,

even unconsciously. Experts who have studied rape find that unpredictability of it occurring to the victim plays a large factor. The perpetrator may know, predict and rationalise he will rape, or has raped, but the victim at no stage anticipates, rationalises or wants the rape on the level of reality.

Pornography assumes because women cause sexual arousal it can be therefore generalized that sexual arousal at a rape is the fault of the victim. They are drawing a false conclusion on an automatic biological response in the aggressor, and failing to see that a victim has not chosen or sexually responded to the rapist's actions.

A man can be predicted to be a rapist, but a woman cannot be predicted to be a rape victim. Recent courtroom trials have tried to focus on the woman's behaviour as causing the rape, and one man was acquitted because the woman was drunk. She may have been looking for reassurance or tenderness instead, and had not exercised caution. But this does not mean she wants to be raped.

Reality therapy is about control, while mental illness is about lack of control, according to Glaser. Want is the driving force. In other words, one never has what one does not want. As we have seen this is *not so* in the case of rape, because rape is never consciously wanted as a reality.

The prediction of sexual needs in psychoanalytical theory is also based on a false reading of the evidence. Freud's whole wish fulfilment and incest theory is based on a misconception. When patients came to see him and complained of sexual abuse in childhood, he did not want to face up to this and instead attributed to his patients an unconscious desire for the parent of the opposite sex. The patient was usually suffering from hysteria, the victim, and not the aggressor was put in the morally reprehensible situation that it was a fantasy that wanted to become a reality and the whole human race was diagnosed as fantasising to have sex with the parent of the opposite gender.

In actual fact what was being truly reported by the patients was sexual abuse carried out by some particular parents or other adults. Freud wanted a theory, and one that would prove to be predictable, to explain the difference between what was being experienced by the patients, and his own perceptions and understanding. His theory of the unconscious while providing a useful framework is seriously flawed by the impossibility of knowing fully what the unconscious is and how the idea has given rise to false theories in psychology. It has given everyone a cop-out.

The emphasis on sex in our culture as a significant cause of *all* our behaviour has resulted in mass permissiveness where people can blame the unconscious for causing their own bad behaviour. In other words people are predicting the outcome of the unconscious by uncritically accepting it and denying their own responsibility in controlling their wants.

But in modern mental illness theory it is the unpredictability of behaviour by scientifically trained professions which dictates treatments, as we have seen, and so what has happened is that treatment must result in predictability.

Part 4: *Culture, predictability and unpredictability.*

Norms are often confused with ethics, simply because they are about desirable and predictable behaviour. As I have shown, predictability is important for the development of the infant, and for social behaviour. Gottman has found that the goal of social interaction is the reduction of unpredictability. He noted, on observing social habits, that there are unwritten rules. For example, when two people encounter each other, the unwritten rule is each person should do some talking of a predictable sort. Hence young people tend to think of polite exchanges are hypocritical as we know that underneath the social exterior people are more selfish than they appear, more given to fear and anxiety, and less concerned than the social exchange would seem.

It seems, however, that unless generalisations are made people can neither anticipate the future nor adequately cope with the environment. Categorisation simplifies, it enables the person to be sociable without risking the core person, the deeper feelings, or the unsure assumptions.

It is only on the cultural level that people find it easier to deal with unpredictability. The occasion of a funeral can be right for allowing the deeper emotions to be shown. Ritual of any kind enables the deeper emotions, whether grief, as at a funeral, or joy, as at a wedding, to brim through to the surface.

Primitive societies understood the importance of ritual. In some ways our society, by emphasising the individual, fails to help deal with unpredictable events or feelings. The initiation rites as described by anthropologists such as Mead and Malinowski have as their purpose a universal meaning for the individual. The unpredictable hormonal changes in puberty are included by way of ritual into the society, and so help the individual in the face of isolated experience. The existence of the menstruation hut helped the young girl to see the positive side of being female, in the presence of older women who had experienced marriage and childbirth. It allowed her to see her own first time experience, which is always unpredictable to the individual, as part of a continuum. So in primitive societies, cogency and harmony were achieved through ritual which created a certain predictability.

Of course these societies did not have our level of scientific knowledge, and women were simplified and feared in their roles. The progentive aspects of women were overwhelming to most societies, who then cast women in the form of deities, the three fold aspect of virgin, mother and crone providing role models and resorts. In these prehistoric times, women were subservient to men. History began with the discovery of the link between copulation and pregnancy. A few cases were noted away from religious taboos, a comparison was made, and a universal prediction forecast. Thus began what Engels called the worldwide fall of women.

Some centuries later, when women had been reduced to silence and total legal bondage to determine paternity, a few women such Aspasia, Hypathia, and Cleopatra astonished by the world by their capacities and talents. Over a period of time, someone added two and two together and a universal prediction was made as to the intellectual and leadership qualities of women. Today, this is a cultural norm.

Prediction remains very much at the heart of our society. The difference between earlier societies and the mass media was that money was not the guiding principle, as it is today. The danger with advertising, which is persuasion linked to predictable norms and personal rights, is that it neglects vital aspects of the truth.

For example, cars are status symbols and are advertised to appeal sexually and socially to people. Predictables are studied in order to achieve the desired results - sales. Omitted is information about the global warming effect. This is only now appearing in news bulletins, although it has been known for some time. In addition, irresponsible advertising and its flaunting of status and success has resulted in making the deprived feel they too must be entitled to partake of what is so openly communicated, so they are tempted to crime. . Similarly, for years aerosols were sold on the prediction, correctly, that they appealed to hygiene and luxury. They caused untold, unpredictable damage to the ozone layer as the CFC's effects were not foreseen, then ignored. They have now been phased out.

Predictability is therefore largely a human artifice. It is not a true index of reality. This has been perceived by primitive societies, but not, as we have seen, by ours. The trouble with prediction is that it encourages collusion, cunning, suggestion and complicity where we need openness, sensitivity, intimacy and truth. Our use of prediction is manipulative, controlled by the few for wealth, and it reinforces stereotyping, none of which are long-range human strategies. As the American poet Ransom wrote "a ceremony must be found." We must find a ritual, and it must be valid for our experience, protective of us, and adventurous. Children do all this through play, for fun, time- passing, danger-learning and prediction.

To play appropriately and achieve our goals would be a useful way to use predictions. It may not be possible or desirable for people to treat each entity they encounter as unique, but unique it is. To avoid determinism, to be appropriate, and to look ahead without too much fear would teach us much. And we should reserve our surprise for the predictions that do turn out to be true, after all, and remember that all we can achieve at most is a rough forecast.

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