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## PARALLOGIC\*: AS MIND MEETS CONTEXT

“To begin with,” said the Cat, “a dog’s not mad. You grant me that?”

“I suppose so,” said Alice.

“Well, then,” the Cat went on, “you see a dog growls when it’s angry, and wags its tail when it’s pleased. Now I growl when I’m pleased, and wag tail when I’m angry. Therefore I’m mad.”

(Carroll, 1981: 47-48)

Parallogic models the relationship between mind and context. It, as does the excerpt above, suggests that systems of *logic* are context specific and therefore *parallel*. This model points out that perceived departures in mental process, reasoning, may be more apparent than real. It also suggests a new way to conceive of men-

\* I am thankful for discussions with Norman W. Bell, Melvin J. Lerner, Amy Tyson and John S. Strauss which helped me to develop my ideas. To the best of my knowledge this is the first usage of the term “parallogic”. T. Lidz used the word “paralogic” but in a different sense, as is discussed in the body of this paper. I use two “l’s” to capture the sense of parallel logic as non-meeting systems.

## *Parallogic*

tal illness by separating breakdowns in mental process from shifts in mental process.

Parallogic links two wide reaching bodies of thinking—General Systems Theory and constructivist thought. When the constructivist recognition of the interpretive capabilities of human beings is linked to the General Systems Theory principle of non-summativity, a new approach for analysis of human mental process emerges as parallogic.

Theorists of mental process have grappled with the conceptual demarcation of brain, mind (Fischer 1987), self and society (Mead 1962). I add to this line of thinking by elaborating a model of the relationship between mind and context. Conventional approaches to the issue have been perpetually handicapped by their inability to work in the linkage between individual and society. The study of brain, mind, self, and society is a polarized set of concepts rather than a continuous range of concepts. In sociological approaches this is formalized as the macro *vs.* micro, societal *vs.* small group, dichotomy. This leaves a gap in social psychology which I propose to fill in by using an unconventional approach, General Systems Theory (GST).

A General Systems Theory approach is able to work along a full range of phenomena beginning with the dyad and moving continuously to any size of group, society included. This possibility arises from the basic principles of GST—the whole is greater than the sum of its parts. The emergent whole in any system of two or more parts is context. This makes it possible to transport insights gained in one level of analysis to any other level of analysis. Patterns in systems are relevant to any system. Also, GST does not carry any assumptions. Therefore its conceptual tools can be used with a variety of theoretical approaches. This impacts the current discussion by allowing the direct alliance between a GST conception of context and a constructivist conception of the properties of human reality construction. Parallogic modes the conceptual derivatives of this alliance and points out implications for conceptions of mental illness.

## PARALLOGIC

Parallogic suggests that while reality may be objective, meaning is subjective and therefore context specific. This idea is supported by constructivist thought and by a General Systems Theory (GST) approach. In a constructivist view there is no such thing as a single objective reality. “[M]an—and man alone—is responsible for his thinking, his knowledge, and therefore also for what he does” (Von Glasersfeld 1984: 17). Human beings search for “fitting” ways to behave in an attempt to order the flow of experience and maintain a degree of continuity between past experience (Von Glasersfeld 1984: 39, also supported by Laszlo 1972). Reality, in the constructivist scheme is a highly subjective, ongoing process of fluctuation and re-negotiation (Von Foerster 1984). This conception does not deny or challenge the existence of ontological reality, rather it attends to the “interactive process which creates information” (Fischer 1985: 50) about reality.

GST adds to the constructivist conception of reality by modeling meaning as a property of context. Meanings, classifications of behavior, are co-emergent phenomena in that they are created in specific contexts. The interpretive capabilities of human beings mean that interpersonal contexts are subjective and therefore highly idiosyncratic (supported by Frischknecht 1987). Systems of logic and normality are context specific social constructions that have their own internal bases of logic. There is no universal baseline criteria for judging what is real, rational or normal. Within this theoretical stance there is no such thing as a single correct reality, rather there are a multitude of context specific realities. Therefore systems of logic cannot be judged universally as correct or incorrect either in a categorical or a relative sense. This makes it possible to regard conceptually each specific system of logic as a line that is parallel to, rather than divergent from, other systems of logic—hence the term “parallogic.” Systems of logic are parallel in the sense that they may start at different origins rather than deviate from a single objective origin. They continue in a linear or logical fashion from their specific starting points.

The concept of parallogic can be drawn out graphically as shown in Diagram 1. This representation demonstrates the idea that logic is a creation that has no inherent correctness or incor-

## *Parallogic*

rectness. All behavior is rational to its system (Satir 1967). Each system has its own unique basis for logic, a unique starting point. From these unique starting points, logical systems run along in their own fashion. Logic systems are based on ongoing processes of interpretation and modification within groups and may therefore show an indirect correspondence to objective reality.

Parallogic suggests that differences between logic systems may be more apparent than real. Systems of meaning creation, definition and classification of behavior are tied to the context in which they originate. Judgements of irrationality, inappropriateness, problem or error, may only appear valid when they are judged from a different system of logic. Watzlawick illustrated this by recalling how Konrad Lorenz had just finished going around his yard “quacking”, in order to experiment with the imprinting of behaviour on ducklings. Lorenz looked up to see passers-by who had just witnessed this “insane” behaviour (1967: 20). This interpretation of behavior as illogical or irrational resulted from the fact that the passers-by were not natively aware of the context of Lorenz’s behavior. Gaps in native awareness become particularly relevant to the issue of diagnosis.

## PARALLOGIC AND DIAGNOSIS

The implication of parallogical view of behavior is that behavior can only be judged to be sensible or nonsensible relative to its native system of logic. This means that before these classifications can be made it is necessary to determine what the native context of a behavior is. Otherwise what may appear as a deviation from a system of logic may in fact be an aberration of observation point. Diagram 1 is a graphic representation of how behavior may show the same degree of difference relative to logical behavior and why the vantage point of the observer will determine whether this behavior is judged to be “contra-logical” or “parallogical.”

Behavior may just appear contra-logical or deviant, when in fact it has originated in a different system of logic and consequently the observer may not be capable of judging its relative sensibility. The judgement will depend on where the behavior is

viewed from. This allies the concept with the idea of “parallax” defined in the Oxford Dictionary (1975: 610) as the “[a]pparent displacement of object caused by actual change of point of observation”. Objects appear to move when the observation point is changed. The reader can experience this phenomenon by placing a finger a few inches from his or her face and then closing left eye then right eye alternately.

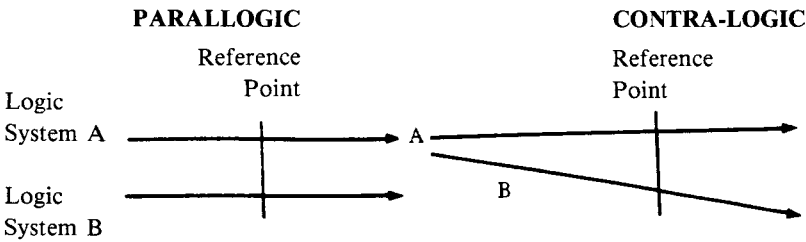


Diagram. 1. A Paralogical Conceptualization of Rationality.

Paralogic points to this idea in terms of interpersonal contexts. If the observer is viewing behavior from a different reference point than the person exhibiting the behavior, it will appear different. Or, as Hamburger suggests “[t]wo different ways of looking at nature can give the same object two images...” (1987: 35). In the current discussion the reference points are the interpersonal contexts into which the observer and the potential patient are integrated. This suggests that what has conventionally been treated as “irrational” behavior may be “non-rational” behavior (Agnew and Brown 1986: 160), vested in a parallel system of logic.

In a paralogical scheme behavior can only be classified accurately as rational or irrational relative to its interpersonal context. Therefore the first step in accurately categorizing behavior is determining the context to which this behavior belongs. Where does this behavior originate? The second step is to discover the context from which the behavior is being observed and classified. If the context of origin and the context of classification are the same then it seems valid to judge a behavior as logical or illogical, fitting or unfitting, sense or nonsense, normal or abnormal,

## *Parallogic*

relative to the logic system in this context. In this instance if behavior is classified as illogical, irrational, nonsensical or abnormal it seems valid to search for underlying biological, or psychological cause for the behavior.

Alternatively if the context of origin and the context of classification are not the same, it would seem fruitful to explore the internal logic of the context of origin to determine whether or not the behavior is illogical or in fact parallogical—originating from a different logical system. This suggests that separating illogical behavior from parallogical behavior is a preliminary step in determining what the underlying cause of a behavior may be.

In the process of diagnosis of behavior as symptomatic or normal there are at least two types of diagnosers, intimate associates and clinicians. Both enter into the process of determining whether behavior is problematic and what action or treatment results. It seems prudent to examine the nature of logic and motivation within both of these groups as part of the process of patient definition.

## *Intimate Associates as Diagnosticians*

I have deliberately placed the discussion of intimates as diagnosticians first. This is in recognition of the fact that the family performs its own “diagnosis”, classifies behavior as symptomatic, and symptomatic of what condition, before the clinician enters the process. Also, as illustrated by Pollner and McDonald-Wikler (1985), the practice of “getting a second opinion”, the family has the opportunity to shop for the diagnosis and treatment they want. This means that the family in effect “drives” the diagnosis and treatment process—starts, slows, accelerates, turns and stops it.

Intimate associates are therefore a crucial part of the process of observation of behavior and its classification as problematic or non-problematic, and the action that will be taken. Emerson and Messinger point out the importance of the process of how “trouble” comes to be defined and managed (1977). Seeking of help outside the family will often be initiated by those in close relation to the potential patient. This is particularly evident when the condition in question is one that is episodic and has symptoms

that involve socially inappropriate behavior such as senile dementia (Hanson, 1989), hyperactivity, pre-menstrual tension or schizophrenia. This relates to the fact that these types of conditions are more amenable to social definition and reliance on current interpretations of past behavior.

Symptomatic behavior may not occur in the presence of the clinician or may escape the diagnostic instruments that are being used in a research design. In this instance the clinician or researcher will often be relying on self reports about symptomatic behavior from patients (Strauss, 1988) or most often from family members. The link between parallax and parallogic is particularly relevant to this discussion when we note that displacement of objects is more acute in the short range. This can be demonstrated to the reader by placing finger in front of nose, closing left then right eye alternately and repeating with finger to nose distances of 2, 4, 10, and 20 inches. Perhaps deviance, contra-logic, appears greatest at the level of intimates. This makes it crucial to discover whether or not the potential patient is in fact integrated into the family's system of logic or is working from a parallel system of logic before making conclusions about the existence of some underlying biomedical condition. This possibility is suggested by Laing and Esterson's work on schizophrenic families (1964). Possible sources of anxiety or motivation within the reporting family, should be regarded as potential sources of bias in data on individuals presented for clinical diagnosis and treatment. This suggests that the clinical diagnosis process takes place within the larger context of the family diagnosis process.

### *Clinicians as Diagnosticians*

When clinicians are considered as diagnosticians, the message of parallogic is that using *a priori* judgements of objective reality to assess degrees of deviation in individual perceptions and behavior can lead to inaccurate classification. The conventional approach to the relationship between family systems and mental illness has been to look at how family systems promote departures from reality. Lidz (1963: 95) used the term "parallogic" to refer to the training that schizophrenics receive in their family

## *Parallogic*

contexts. These families provide extensive training in irrationality. Laing (1976: 200) refers to “mystification”, the masking processes that go on in schizophrenic families. Selvini-Palazolli (1978) points to the therapeutic task of dispelling myths. More recently Reiss has pointed to importance of the internal logic of reality but also stresses the importance of the objective quality of the explanatory systems (1981). All of these authors seem to view mental illness as a departure from some external or objective reality and go on to elaborate how this departure is created. Dell notes this bias in the therapeutic literature in terms of the tendency to regard “paradoxes” as departures from reality (1986).

Parallogic departs from the conventional view by adopting the constructivist stance that reality is a social construction. “[K]nowledge does not reflect an ‘objective’ ontological reality, but exclusively an ordering and organization of a world constituted by our experience” (Von Glasersfeld 1984: 24). Human beings are constantly involved in a process of creation of knowledge that organizes experiences into a fitting pattern but this pattern is not tied to some objective reality. Parallogic attempts to get at the nature of specific processes of reality construction without need of judging their relative success at approximating some objective reality.

Notions about sanity, reality and appropriateness in the objective sense, may not be particularly useful in figuring out why someone is acting in a certain manner if this individual’s definition context is parallogical to the definition context of the clinician. If they are working from different definition systems, they will have trouble seeing this in the same way. How will the clinician be able to understand a logical connection of “why”, a stimulus-response linkage, when the patient’s system of connections may be totally departed from the clinician’s? The connections will be determined by the particular dynamics of the patient’s interpersonal context. Pollner and McDonald-Wikler (1985) document a case where clinicians are confused initially by a family’s insistence that their daughter is normal, in the face of extensive evidence of her mental illness. When what I would call a “parallogical shift” into the family’s system of logic was made, the clinicians became aware that the belief in the daughter’s normality was extremely important within the family and could explain a



great deal of their behavior. This observation was crucial to their understanding of the dynamics of the family's behavior. This case demonstrates the importance of attention to native processes of meaning creation without preset notions or values regarding the legitimacy of the content of the process. Paralogic suggests attending to specific reality creation processes in context.

## DIRECTIONS: PARALLOGIC, MENTAL ILLNESS AND BEYOND

The directions suggested by the model of paralogic concern primarily issues of classification. I developed paralogic by considering the process of classification of mental illness, diagnosis. In this section I point out what paralogic implies for mental illness diagnosis and for models of mental process. Further, I discuss how paralogic can be extended to consider processes of classification as a general methodological issue and what it implies for policy.

### *Diagnosis of Mental Illness*

Paralogic suggests that the meaning of behavior within its native context must be established as a precursor to the classification of this behavior as rational or irrational, normal or pathological. It also suggests careful attention to the source of data on targeted behavior and in particular to situations where this information is provided by family members and is not observed directly by the clinician or researcher. This in no way questions the existence of underlying biomedical conditions. Rather, paralogic points to the confounding effects of human meaning construction processes in context and how a clinician can reduce these biases. Once a paralogical shift is made, it is possible to begin looking for underlying conditions with an increased assurance that a clinical population has been identified validly. The implications of a paralogical view for diagnosis can be considered for three types of contexts, intimate relations, institutional settings and social relations. Each type of context may represent paralogic and as such the opportunity for gaps in understanding.

## *Parallogic*

I suspect the immediate reaction to parallogic is that it questions the competence of clinical diagnoses. This is an oversimplification. Clinical diagnoses emerge as problematic because mental process is embedded in a context which the clinician is unlikely to share with the potential patient. The bias in clinical practice toward medical models of illness forces clinicians to deal with patients as individuals rather than as parts of emergent wholes, contexts. The clinician will therefore have difficulty seeing contextual origins of mental illness because he or she has never been taught to look for them. Meaning which is embedded in the patient's intimate context may not be immediately available to the clinician. Current diagnostic procedures may not encourage seeking out this meaning.

Parallogic can be used to consider ongoing patient evaluation in institutions. Clinicians should be aware that inpatients may become embedded in the institutional situation itself, a context which may not be shared by the clinician. Answers to questions about feelings and perceptions may be misinterpreted if there is insufficient sharing of native awareness, particularly if the humorous or metaphorical intent is lost. A patient's statement, when asked how he or she feels, that "I feel like a banana" would appear irrational. However, if this was intended as a metaphor (being unable to think or move, or having all self-respect peeled away), or a joke, the clinician may miss the meaning owing to a lack of native understanding. This possibility would seem particularly acute when a patient feels fear or insecurity about revealing feelings, possibly in response to a situation where the patient is asked questions in front of a number of clinical staff or in the presence of other patients. Perhaps the metaphor or joke is a way the patient has developed to "hint around" about what they are feeling to test it out. Parallogic opens up this possibility and suggests that the clinician be aware of his or her native context of meaning and how this context may vary from the patient's.

A parallogical view can be extended to think about how social relationships enter into the diagnosis process. Parallogic can be used to consider that contexts of meaning and logic may be defined by shared gender, class, ethnicity, culture or age. Subtle, and possibly not conscious, differences in systems of logic and interpretation, as defined by elements of social context, may im-

pact diagnosis. Where the condition in question contains some aspect of breakdown in reasoning, or social inappropriateness, differences in shared understanding may lead a clinician to interpret behavior as symptomatic (contra-logical) when it is in actuality parallogical. Research could be directed at whether or not shared social context impacts diagnosis outcomes.

### *Models of Mental Process and Mental Illness*

Taking a parallogical view suggests looking for how context impacts the perception of mental illness. Once it is recognized that perceived disruptions of mental process may be linked to the observation point of the observer two possible conceptions of mental illness emerge. First, mental illness can be looked at as a within context breakdown of thinking process (contra-logic). This would suggest looking for reasons for the breakdown. Second, mental illness can be looked at as a shift in the point of departure of thinking process (parallogic). This suggests looking for reasons for the shift.

This separation can be analogized to Busino's suggestion to attend to the distinction between "reason and reasoning" (1986: 89). In a parallogical model reason is not an absolute or universal property; it is a context specific construction. Reasoning can be thought of as the process of reaching context specific reason. Mental illness can thus be thought of either as a shift of reason or as a breakdown of reasoning. Conventional models of mental illness seem primarily focused on the investigation of the breakdown of reasoning.

Parallogic may be a point of departure from which to examine conceptual models of mental illness which underpin clinical practice. It suggests revising conventional models to consider context and incorporate shifts in reason. It could be used to take a critical look at not just how patients are categorized (diagnosis) or how well a category predicts future behavior (course), but at the category itself. I propose to step back conceptually to a time when mental illness categories did not exist and take as problematic that which is now taken for granted. A "theoretical psychiatry" could examine the basic assumptions which underly models of

## *Parallogic*

mental process and mental illness and compare how these models fit existing practice. For example, one can consider what the principle that the whole is greater than the sum of its parts implies for a model of mental process? Critique and revision could be directed at modelling mental process and mental illness in a manner which integrates context.

Recent findings on variations in the course of conditions such as schizophrenia (Strauss, 1988) may suggest the need to rethink conventional diagnostic categories. Parallogic suggests that similar behaviors may have different origins, may either be a case of a shift in reason or a breakdown in reasoning. Therefore constructing the illness category based solely on observed behavior without a full consideration of its context may lead to grouping dissimilar patients into a common category. Perhaps problems with accurate categorization (diagnosis), or prediction of course, reflect problems in the validity of the categories. I offer no proof of this but suggest it as a possible avenue to explore. A body of “theoretical psychiatry” which examines underlying assumptions in models of mental illness may ultimately improve diagnosis and prediction by constructing categories with greater validity. A critical consideration of epistemology, concepts, and indicators, guided by research findings could update the theoretical framework on which clinical practice is built.

Perhaps investigation of shifts in reason, parallogic, can provide a new direction for modelling of mental process in general and mental illness in particular. This possibility emerges from a parallogical view of the relationship between mind and context. Conventional models force a conceptual separation of the individual mind from context. Parallogic offers a means of conceptualizing mind as context embedded.

## *Extensions*

One of the benefits of a General Systems Theory (GST) approach is the opportunity to use conceptual tools developed at one level to consider other levels. GST emphasizes patterns of organization and recognizes the tendency for these patterns to be observed at different levels. The bulk of this paper concerned the process of classification of behavior with regard to mental illness. Paral-

logic can also be used to consider processes of classification as a general issue of methodology and implications for other levels of analysis.

A parallogical view questions the use of *a priori* ideas about classification. Paralogic implies that the expression “a priori” can be translated to mean “from my own context.” It points out that categories which are derived in one context and then applied uniformly across others, may threaten the validity of the category. Classification via arbitrary aggregation of data derived from a variety of contexts, cases, is a methodological procedure which risks misinterpretation. The directive is to attend to the establishment of meaning within context before grouping data across contexts.

To dilate further, consider the implications of a parallogical view for social policy. Gaps, in understanding and perceptions of rationality, may also occur at the level of differing social contexts. Paralogic suggests that because the logic of different contexts may vary, the effects of actions taken in those contexts may vary as well. Therefore it may not be possible or wise to apply the logic of one context to another. Solutions to problems derived in one context may not produce unanticipated side effects. The directive is to beware that policy developed in or for one class, culture, or nation and applied to another, may not achieve what is intended. Policy should therefore be developed via native awareness, a parallogical shift into the context, as a precursor to taking action in that context.

Context is an emergent property of two or more interrelated parts. Systems of logic are specific to context and therefore parallel. Paralogic is a means of developing the mental flexibility to move from one context to another while appreciating the particular nature of each. The message on all levels is that diagnosis, analysis and policy will be more effective when the unique nature of the emergent property of context is respected.

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