

CURRENT PROBLEMS IN DIAGNOSTIC THEORY AND PRACTICE
A SYSTEMIC APPROACH TO CROSS – SCIENTIFIC TERMS IN THE DIAGNOSTIC BABYLON

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'A human being is part of the whole, called by us universe, a part limited in time and space. He experiences himself, his thoughts and feelings as something separate from the rest - a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal decisions and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty.'

Albert Einstein, *What I Believe*, 1930; in Dukes and Hoffmann 1979.

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This paper is speculative. The general question is whether we can find new conceptual frameworks for diagnosing (and consequently treating) children and youth diagnosed with Attachment Disorder. The a priori assumption is that diagnostics only progress when new observation methods are created, or when observation methods are combined in new ways. The key question is whether we can transfer information from one theoretical observation point to another without losing validity. There is a striking difference between the advancing sophistication of concept and method in separate disciplines, compared to the simplicity of methods for transferring and comparing data amongst disciplines.

To illustrate the present day inter-theoretical Babylon you may ask for the common denominator between the following observations: "the frontal lobe neurons in this person demonstrate poor myelin sheathing", "this person has a defective Hoxa-1 gene", "this persons family has a history of schizophrenia", "this person was born 6 weeks preterm", "blood tests show high values for testosterone and low values for blood sugar", "this persons mother was an alcoholic during her fertile age", "this person tends to have short and superficial relationships", "this person has a criminal record", "this person has hostile fantasies about father", "this person lives in a lead polluted area", "during military service, this person was exposed to repeated traumatic experiences", "this persons mother is a Presbyterian, the father is a Buddhist. The person has two elder brothers and a younger sister".

What would you say was the diagnosis, and how would you discern whether we are talking about a young

man diagnosed with attachment disorder – his nurse in the psychiatric ward – or the president of a country? "Common sense" is the only way to compare data from different theoretical perspectives. Diagnostic method today practices what a housewife will make for birthday: a layer cake of incompatible statements from several disciplines. Major reasons for this "multiple diagnosis" development are probably the advance of science in general and a higher degree of specialization, and the fact that any diagnosis represents a fraction of economic interests in a very competitive market, looking for new problems and fields of economic gain. The socio-economic impact on professional development is, however, only a background factor in the present text.

The "common sense" of today's psychiatric diagnostic systems (such as the DSM, Diagnostic Statistic Manual) is to emphasize "constant behaviour traits" as the criterion for a given diagnosis, thus trying to overcome the subjectivity of the individual clinician by giving a set of observable criteria for abnormal behaviour, and to create criteria that are independent of a given discipline (e.g., neurology or psychoanalysis). In this tradition, "Attachment Disorder" is a child and pre-adulthood diagnosis. The premise for using the diagnosis is that the child has been exposed to abnormal patterns of care (deprivation, violence, abuse, etc.) from birth and onwards, and the supposed effects on behaviour are supposed to be stabilized only from age 5 and onwards. The subtypes of the diagnosis are massive social inhibition, or very ambivalent and sometimes violent behaviour, or indiscriminate social contact behaviour (see appendix "A").

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Systemic theory and psychiatric diagnoses

In physics, “a system” is defined as “a number of elements perceived as parts of a whole”.

Here, I shall apply the systemic way of thinking as a way of understanding how knowledge is gathered and ordered, and, in diagnosis and treatment, as a possible framework for combining data from different scientific fields (I should warn the reader that I am *not* talking about “systemic therapy”). The systemic way of thinking was originally developed in physics by Heisenberg and others, and then transferred and modified to a therapy for social systems and groups, such as families).

When addressing any diagnostic psychiatric category such as “Attachment Disorder”, we face a diagnosis without a simple, mono-causal explanation. The correct description of the term is a “syndrome”, a cluster of behaviour symptoms without a quite known cause. Polio is induced by poliovirus, whereas (as far as we know) attachment disorder can be induced by a range of events before age 2 that have very little in common. This calls for an understanding of how the syndrome is understood by geneticists, neurologists, psychologists, and sociologists.

Even this is not enough - if these explanations of causality should not be merely alternating or become a heap of overwhelming incongruent information produced by different disciplines - a theory must be able to establish the common denominators linking one scientific discipline with another. One will find many a schism in today’s theories of personality disorders and their treatment. Consider for example the psychoanalytic theory of “character” (personality defined as a triple element system, and variations of therapies developed from that basic assumption). Nothing wrong with that, except that the “character” concept is generated from a single scientific field and it’s limited observation methods, and misses the connection to, let us say, genetics or neurology. Thus the range of possibilities for the therapist seeking cues for therapy is also narrowed down to versions of one method (in this case using psychotherapy to support the integration of the three elements of personality). The same problem can be demonstrated by any other discipline such as genetics or neurology. Even if you assemble a cross-scientific team, this obstacle will not be overcome; you’ll just end up in a Babylon of terminologies, concepts and suggestions for treatment. Or a vague idea that these different levels of observation somehow sum up, creating a certain behaviour.

Recent models of causality in psychiatry and psychology often display the individual in the middle, the immediate environment surrounding the person, and tendencies in society as the outer frame. This pre-Cartesian frame seems very parallel to the medieval picture of the seven heavens, as long as the internal coherence between micro-events and macro-events are not accounted for.

Einstein’s grid

In physics for example, Einstein pointed out that progress in comparing geographical data was only

possible when the three dimensional hypothetic concept of coordinates was constructed, freeing “distance” from being tied to “two known geographical points on the surface of a rigid body” (earth). No such coordinate system has been constructed between the sub-disciplines of psychiatry, and hence the scientific micro and macro universes live in splendid isolation from each other. No “Lorentz Transformation” in psychiatry allow us to transform data from one coordinate system to another.

From this point of view, the next step in developing science will be looking for meta-scientific terms, allowing results from one field to be falsified or verified by those of another field. A truly multidimensional diagnosis will be of a new order: it will sum up observed changes in structures and processes at all disciplinary levels into a “personality constant” or “identity” if you will.

The basic terms: “theory” and “diagnosis”

First of all, what is a “theory”? “Theoros” meant “spectator” in ancient Greece. The word “theory” is a derivation, suggesting that your position (in the theatre or stadium) will influence your conceptualizations, in other words determine your theoretical scope. Simply because any position will favour a certain focus, and what one perceives in that focus will influence the concepts one produces as a spectator.

Imagine yourself coming from Mars, wanting to diagnose what “humans” are. By chance, you buy a ticket for a football game. If you sit close to the field, you will as a spectator develop an idea about what is going on around here, and you will probably focus on the behaviour of a few players being close to you. If kind earthlings invite you into the field as a player, you will maybe see a grey mass of spectators around you, and the nearest players. You may move to another position, let’s say the back top row. What you perceive now is completely different: the sounds are more like a waterfall, you don’t see players, but opposite teams, you don’t see and smell grass but you see a lawn, and the form of the entire stadium. A player running fast seen from your initial position now seems to move like a snail. Thus, the “theory” you develop here will be very different from the first one. And what you see from different positions cannot be directly compared. Time and distance measures in space are not equal (comparable) between any two positions, unless you have an abstract coordinate system, such as meters and seconds. Quoting Einstein again, where he addresses the problem of measuring the length of a train – comparing the result from an observer standing still on the embankment, and a person inside the moving train making the same exercise:

“A priori it is by no means certain that this last measurement will supply us with the same result as the first. Thus the length of the train as measured from the embankment may be different from that obtained by measuring in the train itself. This circumstance leads us to a second objection which must be raised against the apparently obvious consideration of Section VI. Namely, if the man in the carriage covers the distance w in a unit of time—measured from the train,—then this distance—as measured from the embankment—is not necessarily also equal to w ”.

One might argue that the exchange of data between theories is based on such an illusion of objectivity of “distance”.

Another word from Greek, “Dia-gnosis” becomes important. It means “two kinds of knowledge”, or “by knowledge”, indicating that a proper conceptualization requires that you must observe from at least two angles in order to form a meaningful concept of what you see (this condition is inherent in Einstein’s train experiment). And, two people observing from different positions must compare their observations in a “dialogue” they must talk about what they each saw in order to form a common idea of what has been observed. Thus, the process of diagnosing is in danger of being contaminated by the illusion that the two observers operated in the same time/ distance frame. This raises the first challenge from the theory of relativity: how can you order two observations made from two positions in time and space in a common grid system?

Let us leave this question open for a moment and proceed with the “football stadium theory”.

Changing positions from time to time, you will start constructing a more general concept of what is going on, and from any position you will be able to recognize, compare with other apparently different phenomena, analyse, predict events and intervene in relevant ways. You now have an effective multidimensional “football theory”. But the interesting point is: how did this refined, abstract insight come about?

From a systemic point of view, you have ordered different perception elements into subsystems, systems and overarching systems, a whole or a Meta (“overarching”)-theory. And you have fulfilled one important condition for a valid theory: By changing positions many times, you have become reasonably independent of the immediate appearance of objects and processes, of directly experienced time and space in any one position - obtaining a still smaller degree of personal bias and field dependency. The theory will possess qualities absent in any former partial theory. It will enable you to generate ideas and interventions which were invisible from any of the formerly mentioned single positions in the stadium - on account of the simple fact, that you, the observer, changed position or observation point and exchanged observations with other observers.

The problem here is that the fields of scientists today are specialized to a degree where no one person can move from one position to another without losing credibility. Our ability to gather data in one field has strengthened Einstein’s prison of subjectivity. Diagnosis can be compared to a number of men digging still deeper individual holes to uncover the “causes of Attachment Disorder”, but without a language to exchange their results. As Niels Bohr put it: “The opposite of precision is not imprecision, but clarity”, and we are increasingly running short of clarity.

“Attachment disorder” defined by different disciplines

For a start, let us see what each discipline has to say about “Attachment Disorder” and the most severe

form ending in Psychopathy or “Antisocial Personality” in the adult person.

The problem of the DSM diagnosis “Attachment Disorder” is that it can only be used after age 5, and that it is limited to a description of general behaviour characteristics. In real life, you can predict the symptoms of Attachment Disorder at age five almost before the child is born. In the following I shall define Attachment Disorder from the scopes of different theories. If you as a reader imagine the stadium again, and the observation of an Attachment Disorder child instead of a football team, I shall start my description at the lowest row (the microcosm of genetics) and move upwards and away to the top back row (the macrocosm of culture). At each step, a few examples will be given to illustrate what is seen from the position of that discipline.

Genetic definitions

There are several genetic definitions. One general observation (Schulsinger) was that children placed in foster homes before age one will more often become psychopathic adults if their parents were diagnosed as such, compared to a control group with non-psychopathic parents and identical life conditions. Schulsinger also found that genetic families with many members suffering from psychosis also have many psychopathic members. This lead Schulsinger to the assumption that psychopathy often has genetic components, although the specific components could not be defined.

In studies of specific genetic components, several have been suggested. The brain is constantly balanced by chemicals that either inhibit or facilitate impulses, and thus also regulate impulsive behaviour. Serotonin plays an important role in impulse regulation, and a genetic deficit can result in a general tendency towards impulsivity in the brain, and thus cause a child to display impulse-ridden behaviour (Schalling 2001), including aggression. Schalling suggests that this problem is an important factor in 10% of those diagnosed as psychopaths. It is also possible that some behaviour traits of Attachment Disorder may be influenced by a genetic disposition while others are caused by aberrant parenting. In a study of 3687 pairs of twins, Viding (Viding et al. 2005) found that callous-unemotional behaviour seems to be closely related to genetic heredity, whereas antisocial behaviour in general had no such relation (and therefore probably is a result of aberrant parenting early in life).

Neurological definitions

The scope of neurology is not the genetic constellations in the cell, but the CNS cell and its relation to other cells, forming functional units in the brain.

In McLeans model of the brain, three distinct units have developed through evolution. The “reptile” brain located just above the spinal cord, the “emotional and social” brain shared by primates, and the cortex, unique to mankind, regulating impulses, coordinating higher

functions, impulse regulation and language. According to Bowlby, attachment is a system inherent in the “emotional and social” brain. This system developed through evolution to protect the newborn, because the more complex brain of the primate is not functional from birth, but must develop for years. In this period the baby is very vulnerable. “Attachment” is a behavioural system ensuring physical closeness between mother and child in the first years. The system is activated whenever mother and child are separated (crying, protesting, longing, clinging, touching, etc.).

If mother and baby are physically isolated from each other, natural attachment behaviour can be disturbed, including all later relations to others. These disturbances are more or less equal to the descriptions of the DSM “Attachment Disorder” diagnosis.

Neurological models of understanding also include failure of the cortex to control impulses. This can be caused by brain injury, by diseases inflicting cortical functions (such as meningitis), or by a lack of early stimulation, lowering brain activity to a point where cortex no longer is able to inhibit impulses from other brain systems. This is also a component in the ADHD diagnosis (Attention Deficit, Hyperactive Disorder), also known as DAMP (Dysfunctional Attention, Motor planning and Perception). Finally, the cortical function can be disturbed by dysfunctional brain cells, resulting in epileptic seizures. Some children have discrete sub-clinical seizures, and the spike-wave variant can cause predatory, aggressive behaviour and a general lack of concentration.

Personality development definitions

Freud was a medical doctor with an empirical standing. He claimed that the general function of “character” or (today) “personality” could be fully explained as the sum of minor processes in the nervous system and variations in hormone production. However, since the empirical knowledge of the brain at his time was next to nil, he decided to bridge the gap between knowledge and clinical work by creating a symbolic description of the general psychological functions resulting from brain activities as a three dimensional structure, character: Id, ego and Superego. This of course raises a major problem of documentation, but his model is no less hypothetical than the present diagnosis of attachment disorder, which is simply a description of a set of behaviour characteristics.

The most important distinction in the character model is between the adult *neurotic personality* (having problems resolving the conflict between internalized norms and personal needs) and the *psychopathic personality* (having no such problem, since the superego function has not been formed, or has no regulating influence on the personality as a whole). The neurotic personality spends a lot of energy on *internal conflict*, building defensive mechanisms instead of living out needs in a socially acceptable way. The relation to the therapist may be loaded with defensive transference, but forms a bond which can be worked with. The psychopathic personality is characterized by a lack of internal conflict (because of the reduced superego function), but so much more shows a proneness towards

external, *social conflict*. Moreover, the psychopathic client does not experience guilt or pain and has no awareness of “having a problem”, and will rather try to manipulate the therapist and the environment in general. Vanggaard (1985) defines these two variations of personality structure as *autoplastic* (the neurotic child tries to reorganize internally with little luck) and *alloplastic* (the psychopathic child spends all energy on efforts to change the environment). The attachment disordered child will be found towards the psychopathic end of the scale, since the failure of early emotional contact has prevented the forming of an effective internalization of parental values and feelings.

Freud’s descendants, most notably Melanie Klein, created a model of the development of personality as a function of the early mother (or caretaker) and child interaction, resulting in an independent internal structure in the child. Early interaction forms the Object Relation, allowing the child to develop from a symbiotic experience, gradually experience itself and the mother as two separate entities, and finally experience itself as an independent individual. One of the variations of this theory is the concept of Sidney Blatt, based on the assumption that cognitive structures and perception originate in emotional structures formed in the object relation. Blatt differentiates between three degrees of development in the child’s emotional discrimination and perception of the mother.

1. Evocative constancy (0-6 months). Basic attachment

Emotions are still evoked more by the presence of the mother. She becomes the emotional “figure”, everything else becomes “background”. Since perception is not very precise, the “mother” is not necessarily a certain person, but someone who communicates in the same caretaking way. The object relationship is being formed as a specific set of emotional reactions when a caretaker is near.

2. Border constancy (6-12 months). Anxiety management

Now perception is more developed, the baby can separate “known” and “unknown” people, and remember the mother even though she leaves the room for a short while. Consequently, fear of strangers and fear of separation enter life. Emotions are insecure when new people are introduced or when familiar people leave.

Learning to perceive and focus on the mother helps the child organize tools for perceiving all future objects and people in the environment. The child will at first learn to separate the maternal gestalt from the background. A little later, he/ she will be able to perceive and concentrate on environmental objects all together (like a rattle), since she has now obtained borders - and figure/background constancy. The child examines the different aspects of the mother (eyes, mouth, hair, smell, movements, etc.) and learns to recognize them. She is now able to know whether she is held by her mother or by someone unknown. Consequently she reacts with

fear and tears to separation and strange people. A little later in development she will prefer well-known objects to unknown and have a need for repetition and recognizable surroundings. She now has constancy of recognition. In this phase the threat to the baby is the horrible fear when discovering for the first time that mother can 'disappear', and the baby can feel totally abandoned. This is something experienced by any toddler when being put to bed, but she will learn to control the fear if the parents can be empathic and make daily separations a gradual process, and not a traumatizing experience.

3. Internalization constancy and identity (12-36 months)

The toddler effectively internalizes the emotions and moral attitudes of the parents.

The child becomes aware of itself as a separate person and creates situations to grasp "my impact on the environment". Now the resolution of internal conflict, needs/parental wishes, gradually becomes possible, and the child experiments with ways to fulfill both. Unresolved internal conflicts will produce feelings of guilt.

The absence periods of loved objects are coped with by repression; in order to be able to function without grief, the child can to some extent repress the temporary loss of the object by emotionally "forgetting" the person until he or she reappears.

In this frame of reference, attachment disorder behaviour will result if mothering in phase 1) or 2) has not been sufficient. A severe, general lack of mothering especially in phase 1) will result in a psychopathic, unattached person, and a general lack of empathic mothering in phase 2) will result in paradoxical, aggressive/ dependent, ambivalent attachment and poorly controlled emotions.

According to Blatt, the structure of cognitive functioning will form on this emotional base. Thus, the client with insufficient mothering in phase 1) will have problems in motivation (emotions are not evoked by others) and in figure/ background separation (the meaning of something, what is important in a sentence, keeping a focus for longer periods, etc.). The client with insufficient phase 2) mothering will have problems in experiencing the world as stable (breaks down whenever the background is changed, quickly shifts between omnipotent and depressed, self-annihilating positions, will constantly test borders, etc.).

The idea of emotional structures underlying cognitive processing and quality is supported by the observation tradition of attachment studies. The attachment patterns described by Ainsworth and followers in mother-child interaction (when the baby is 12 months) are relatively stable through life into adulthood. In the Adult Attachment Interview, designed to diagnose the attachment pattern of adults, four categories are found: the secure, the dismissing, the preoccupied and the disorganized attachment patterns. Research has shown that the way the persons structures his or her narrative of childhood attachments during the interview reflects distinctly different emotional

dynamics, influencing the person's ability to answer relevantly. These aberrations indicate what attachment pattern is characteristic of the person. The *securely* attached person will tell about early attachment figures in life in a coherent and relevant way, emphasize the importance of attachment, and often have reflections about the motives of early attachment figures. The *dismissingly* attached person will give short, factual answers, have difficulty remembering childhood, emphasize independence, idolize early figures in spite of referring many negative incidents, and ignore early losses of important persons. The *preoccupied* pattern person will be consumed by traumatic experiences of loss, still display anger towards early attachment persons, and be so affected by talking about them, that he or she will lose the ability to answer relevantly, use very vague terms, will focus only on details and loose coherence in the narrative process. The *disorganized* pattern person will often change focus in an irrelevant way, interrupt answers suddenly, have difficulty discerning him or herself from others, and be confused in the perception of time and space.

Group perspective definitions

In the group perspective, the individual is an element in the greater whole of group dynamics. Thus, "personality" (as an internal structure) is not in focus, whereas interaction is, and the behaviour of the individual is interpreted as a variation of a group phenomenon. E.g., in the Tavistock tradition, any action on behalf of the individual is interpreted as the group expressing something through that person. In the American tradition, the concept of social role or the constellation of roles in the group sees individual behaviour as an adaptation to group norms or conflicts ("persona" meaning: the mask carried by an actor in the play).

Another group perspective theory, the systemic, rests on the assumption that the group develops more or less relevant patterns of communication, and that these patterns are the object of intervention. The basic assumption being that if you help the elements (family members) to communicate freely, the whole (the family) will organize itself in more flexible and supportive ways, thus helping the individuals by forming a relevant base for interaction).

From this angle, the attachment disorder behaviour can be understood as one symptom of dysfunctional family interactions and structures, or as the child's way of coping with perpetual conflict between paradoxical inclusion and exclusion in adverse groups (the child's family system versus for example the foster family system, the school system, etc.).

Cultural perspective definitions

The cultural perspective offers several angles in the understanding. One being, that any sudden radical change in society will affect the traditional ways of upbringing and contact between parents and children, and the group norms in society. Events such as migration from rural to urban ways of living, industrialization,

war and famine, the changes in work and production procedures all affect the possibility of child/ adult contact.

Another angle is anthropological studies such as those of Margaret Mead, suggesting that the social adaptation to the environment of a tribe or a people affect the norms for parent/ child contact. Thus tribes engaged in local wars with other tribes tend to give very limited early care (resulting in aggressive children), whereas environments demanding cooperation favour much and more gentle child/ parent contact, resulting in socially engaged and sharing individuals (such as the Eskimos).

Studies in attachment have been much accelerated by the fact that interracial adoption has become much more common due to cultural changes and increased global communication.

Discussion of perspectives

All these different theoretical angles in “the scientific stadium” are of course valuable in that they widen our understanding of attachment problems, and they each offer a definition, and ultimately also a “therapy”. However, they are separate perspectives, and principally represent very limited understandings and methods. I have no intention of resolving this problem, but to point it out as a possible focus for future professional attention and discussion. In the following, I shall comment on some of the obstacles facing those trying to create a systemic or in some other way overarching theory of Attachment Disorder (or any other psychiatric diagnosis).

Walking up and down the ladder of scientific disciplines

The suggestion is simple: what if we systematically observe from all levels at one time, and compare data gathered within a specific time frame. And what if all levels use systemic terms for their description?

Let me give a few examples of studies approaching this method.

Robert D. Hare observes the same phenomenon from two scientific positions: clinically diagnosed psychopaths do not respond more intensely to emotionally loaded words such as “Mother” than to the word “teaspoon” in a lie detector test, measured by galvanic skin response, as “normal” persons do (Hare 1999). Here, results from two observation points are compared, and the result is interesting for that reason alone.

What if we had incorporated (in that same experiment) differences between the control group and the psychopaths in metabolic brain processes (such as Serotonin concentration in a blood test or a brain scanning result)? Or had been able to detect differences in genetic structure and processes between psychopaths and the control group?

In another tradition, Schore (2001) and others compare microcosmos studies and macrocosmos studies (observations of emotion regulation and right brain development). The hypothesis being, that if the mother

has not repeatedly helped the child control emotion between age 10-18 months by soothing it, the prefrontal cortex is unable to inhibit the Amygdala alarm/ panic impulses later in life.

Only, in these examples the studies were not performed with respect to identity of time and space.

How can we unite different observation types?

If scientific disciplines were inter-disciplinarily coherent concerning definitions of observation, we might develop common criteria for observation at all disciplinary levels. We could walk up and down the ladder, knowing that what is a whole at one level (using one “scope”) becomes to us an element in the greater whole on the next level. What is an invariant structure at one level is perceived as a process on the other. We would then have an electron micro- scope, a geno- scope, a bio- scope, a neuro- scope, a psycho- scope, a socio- scope and a culture- scope with a common basis. Thus, we would be able to construct common terms valid on all levels. The “diagnosis” of Attachment disorder would have an entirely different empiric basis.

Criteria for a systemic diagnosis:

Simultaneity in Observation - Identity of System- Descriptive Terms – Common Denominators for Time/ Space /Mass Differences between Observation Points.

One criterion for a valid systemic diagnosis is already evident: different observation methods must be used simultaneously, within an invariant time limit. We can't make a psychological test one day and a genetic test 5 years later, since this heightens the risk of new developments in the psychological and genetic systems of the person studied. In a systemic diagnosis, we must unite different types of observations with respect to the one basic constant: the observer's position in time, in relation to the object studied.

To be addressed is consequently the time/ space/ mass difference between observation levels: an “event” (the period from the onset of a process to its ending and possible repetition) is not the same on all levels. I.e., while a person is saying one word, his neurons may have fired and performed a refractory period many times. In order to compare data, we would have to define the time, space and mass frame for “an event” on each of the levels measured. Such as (arbitrary choice): “one time (or space/ or mass) unit at the clinical observation level is equal to 1000 units at the neurological level, 100000 units at the genetic level and 1000000000 units at the atomic level”. It should not be too difficult to construct a mathematical “equalizer” for observations from different levels based on a simple definition, e.g. “the distance from the observation point to the structure or process observed”. Also, we would have to define objective acceleration/ deceleration constants, separating at what point something is defined as a “process” or as a “structure”.

We already have tentative common denominators: Terms describing dynamics, the sum of structure and process. Is there really any difference between

describing hydrodynamics and psychodynamics? (perhaps in the object studied, but they share a quality of observation; they both describe a finite system).

Examples of such denominating terms can be:

- instability/ stability
- border/ confluence
- chaos/ order
- relative speed
- element/ whole
- relative size
- gravity/ entropy
- affinity/ rejection
- constancy
- inertia
- density
- pattern
- interference
- intensity

Concerning structure, we may ask if there are certain characteristics of structure or processing patterns in the diagnosed attachment disordered child (the word “instability” intuitively comes to mind...). If so, from how many disciplines can a given systemic characteristic be observed? Is there a nuclear structure differentiating these clients from others? A protein structure? A neurological structure? A personality structure? A social interaction structure? Let's say just for the example, that a certain chemical balance could be observed in the majority of these persons blood, that a certain genetic structure could be found, that a certain organization could be observed in the person's brain, a certain pattern in clinical dyadic contact, and that a certain pattern in group behaviour could be observed - simultaneously.

Expressed in terms of process: A certain metabolism is observed in the blood (such as a special pattern in the release of stress hormones). A certain genetic exchange activity may be recognized at the same time. A certain pattern in the frontal lobe nerve cell communication may be seen. A certain pattern of emotional expression is seen. A certain high/low activity pattern in dyadic contact is observed, and a fight/ flight behaviour occurs in the group setting.

The criterion for interdisciplinary diagnostic success will be the ability to predict – and in time influence – from observations on one level what is going on at other levels. And that data from one level can verify or falsify data from another.

Criteria for a systemic hypothesis - and the subsequent experiment

The point being, that the aim of a systemic diagnosis is to identify and synthesize characteristics of structure and process from all levels of observation, when one variable is changed on any given level. This is a complex endeavour, but considering present day simulation systems any average computer could probably do the job (for example, make a simulation of the nervous system in a simple organism and see what happens if we change one constant on any level).

To summarize “the systemic experiment”:

simultaneous observation on all levels is performed. Data from each level are examined for structural patterns and process interactions. By means of factor analysis, possible coherences between patterns at different levels are found. From this analysis of coherence a number of hypotheses regarding the system pattern as a whole are formed and tested by changing variables on different levels.

By repeating this modus operandi a number of times, we might reach a diagnosis describing an identical pattern on all levels (interesting), on some levels (equally interesting) or none (equally interesting). By prolonging the time horizon for observation periods, we may have multi-level observations of e.g. “attachment disorder and a control group” for a week, allowing for the study of differences in dynamics at all levels and comparison between levels. This may generate a “second order identity” of the diagnosis: a meta - pattern of the whole reflected on each level in different ways.

Conclusion

The purpose of these hypothetical criteria, experiments and results is to suggest that we may define and uniform the criteria for interdisciplinary cooperation and experimental conduct, and thereby qualify our results by deducing one multi-dimensional pattern instead of “layer – cake diagnoses”.

Efforts to produce uniform criteria and terms would probably have a positive effect on individual disciplines by transferring ways of categorizing and interpreting data between disciplines.

A number of systemic terms have been suggested above, but perhaps the idea of developing such uniform rules for inter-disciplinary exchange of data is more important than this specific example.

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APPENDIX A:

DSM-IV 313.89: Reactive Attachment Disorder of Infancy or Early Childhood

- Beginning before age 5 and occurring in most situations, the patient's social relatedness is markedly disturbed and developmentally inappropriate. This is shown by *either* of:
 - Inhibitions. In most social situations, the child doesn't interact in a socially appropriate way. This is shown by responses that are excessively inhibited, hypervigilant or ambivalent and contradictory. For example, the child responds to caregivers with frozen watchfulness or mixed approach-avoidance and resistance to comforting.
 - Disinhibitions. The child's attachments are diffuse, as shown by indiscriminate sociability with inability to form appropriate selective

attachments. For example, the child is overly familiar with strangers or lacks selectivity in choosing attachment figures.

- This behavior is not explained solely by a developmental delay (such as Mental Retardation) and it does not fulfill criteria for Pervasive Developmental Disorder.
- Evidence of persistent pathogenic care is shown by one or more of:
 - The caregiver neglects the child's basic emotional needs for affection, comfort and stimulation.
 - The caregiver neglects the child's basic physical needs.
 - Stable attachments cannot form because of repeated changes of caregiver (such as frequent changes of foster care).
 - It appears that the pathogenic care just described has caused the disturbed behavior (for example, the behavior began after the pathogenic behavior).

Specify type, based on predominant clinical presentation:

- Inhibited Type. Failure to interact predominates.
 - Disinhibited Type. Indiscriminate sociability predominates.
- *American Psychiatric Association DSM-IV Sourcebook, Volume III*