A Proposal for Scientific Analysis and Naming in Psychiatry-Related Healthcare

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Introduction

What is a mental disorder? Mental means that your mind is mistaken and if it is that and just that, then it's a mental disorder. Not everything that looks like a mental disorder has mental causes.

Some disorders as we know them are caused by internal causes, others by external causes. Not all of them are mental, although the effects can look the same. The fact that the effects look the same results in people with differing causes for their problems often receiving the same treatment.

If you want to cure a disease or disorder, you need to treat the causes, not the effects. You need to take away the problem. How do we establish that doctors of any kind no longer treat the effects, but treat the causes instead?

The one thing we don't want is for doctors to say that drugs cause schizophrenia, with schizophrenia being poorly named and poorly defined. Some psychiatrists have a tendency to want to oversimplify clearly disjunct disorders, even disregarding proper scientific evidence, to come up with one treatment for all that then somehow fails for the people that can't be helped.

The worst kind of psychiatrist probably is the psychiatrist that correctly remarks what needs to be done for media attention, but then in practice fails to do it and help those that need it be done.

This leads to common drug-fueled junkies being locked inside mental hospitals, even though they should probably just go to jail for a number of years to detox and make amends with their families after that. Either that or they need to go to a detox clinic.

The one thing you don't want to do is put them in a mental hospital, with plenty of access to drug dealers outside of them, which kills the in the same amount of time they would get in jail to detox.

What's in a Name?

Everything, if you want it to be scientific. The name for any disorder or disease should describe it in a few words, illustrating its causes and effects.

The name "schizophrenia" was based on the assumption that different parts of the mind seemed to operate fine by themselves but weren't able to work together: it represented a mental divide. All of this was an assumption that disregarded the causes and the actual scientifically discernible effects, partially due to the fact that doctors failed to research socio-environmental factors, partially because they didn't have the means we do today.

Naming and Modeling a Diagnosis

What classes of causes and effects can we discern that lead to mental disorders and diseases? And can these be further sub-divided in child-classes with narrower specification?

The name should be represented by an aggregate of a cause and effect. Figure 1 depicts the basic *Unified Modeling Language* (*UML*) representation of a diagnosis: diagnosis = cause × effect.

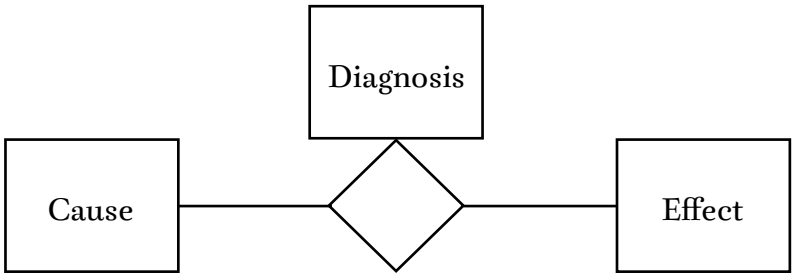

Figure 1 – Naming psychiatry-related phenomena

Please note that I also use the following mathematical logical operators:

=	equals *or* becomes *or* consists of
×	and a.k.a. consists of (multi-dimensional model)
+	or (non-exclusive, so may be one or both)
|	exclusive or (one, not more than one, of the depicted options)
⟶	leads to
↠	and *and* leads to
a^{+}	one or more of *a*
a^{*}	zero or more of *a*
$a^{m..n}$	*m* to *n* of *a*
X(Y)Z	evaluate *Y* first before *X* and *Z*

The Cause of Problems

There are many causes leading to all kinds of effects witnessed in mental and physical healthcare alike, as well as in the criminal justice system.

When it comes to causes, you have three parent-classes that can have a number of sub-classes. A cause can be organic, stress, or a drug. Figure 2 depicts the UML representation of child-relations to the parent-class "cause": cause = organic | stress | drug.

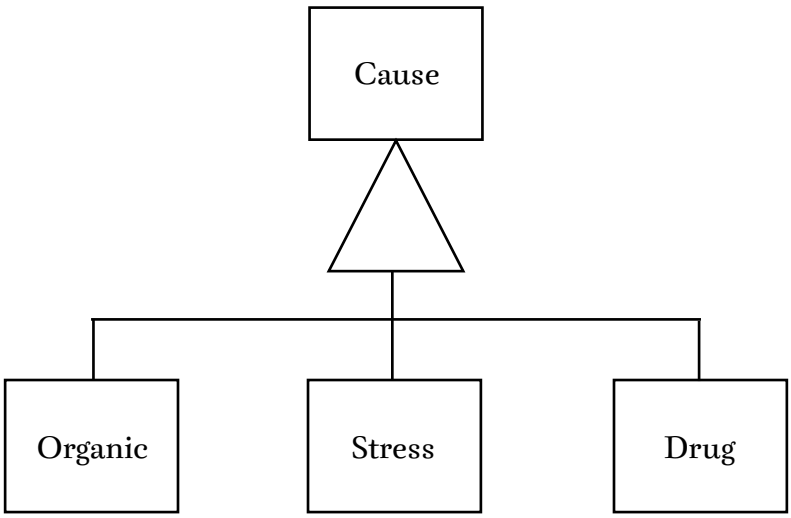

Figure 2 – Discerning causes

When you look at organic causes, these can be developmental, resulting in different brain connectivity structures or different physical structures of the full body including the brain, but they can also be accidental, with the same types of results. As such an organic cause consists in itself of a physical cause and resulting effect, namely a physical trait.

The main problem you then face is that you can't have the same name for a class twice, so you need to look at the description a bit closer. Instead of calling it a cause, either accidental or developmental, you should call it an origin. Instead of calling it an effect, it should be labeled a structure, either connective or component. Figure 3 through 5 illustrate this.

Connective then indicates that all parts are there, but the connections aren't okay. Component means that whole parts are either missing or added to the physical body, either inside or outside of the brain, causing the problem. You might think of a brain tumor, tumorous or inactive glands causing hormonal shifts, or the severing of parts of the brain or body.

Logically you index figures 3 through 5 as follows respectively : organic = origin × structure; origin = accidental | developmental; structure = connective | component.

You then proceed by describing the type of accident or developmental problems, much like you have to describe how connective structures or the components the structure consists of are disordered, broken, or missing.

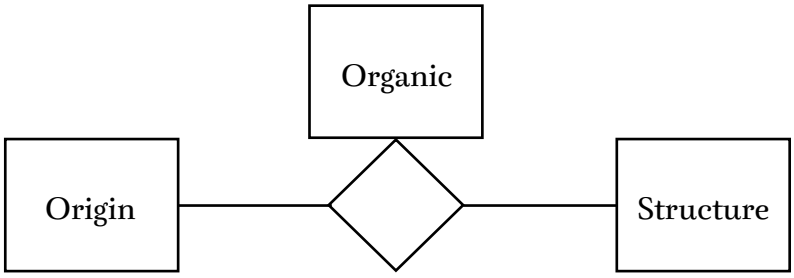

Figure 3 – Organic causes

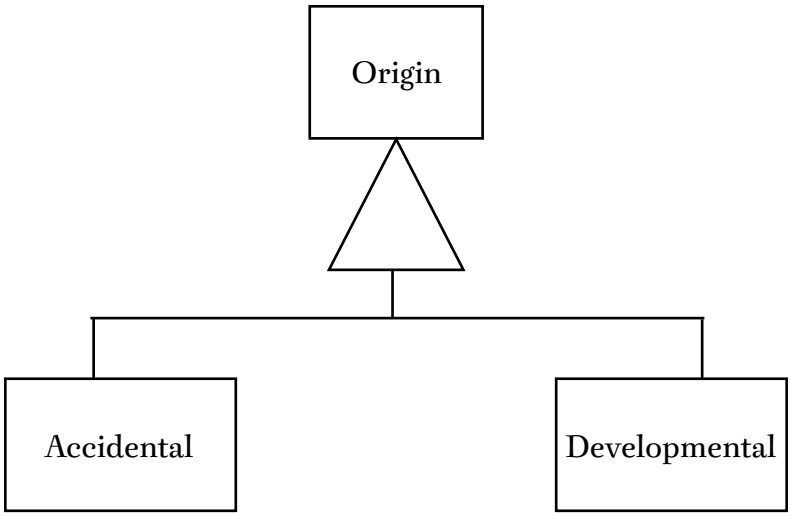

Figure 4 – Origin of organic causes

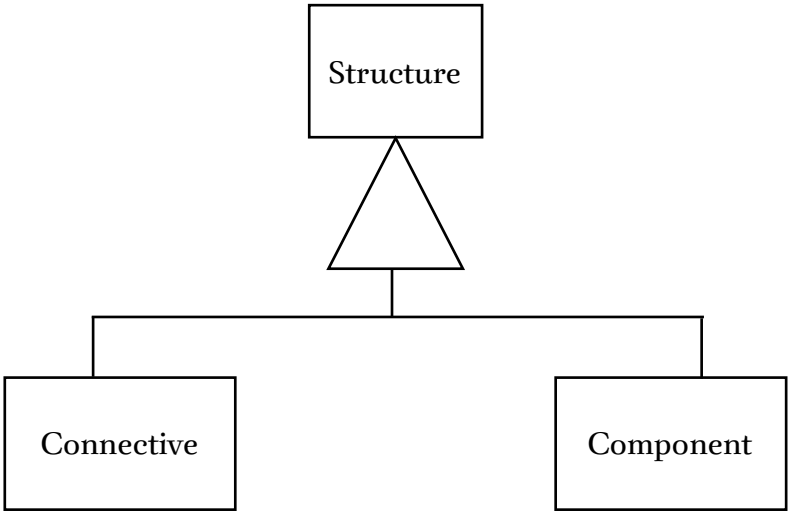

Figure 5 – Structure of organic causes

Relating the diagnosis to a person

One patient may have a range of disorders and diseases that interact and influence each other, meaning they should get one or more diagnoses. A patient also is a person, but a person doesn't have to be a patient as illustrated in figure 6: (patient = person) & (diagnosis^{+} ⟶ patient).

When the cause of the disorder or disease isn't organic, but stress, then you need to evaluate the full spectrum of physiological, psychological, and sociological stressors related to the patient's character, and index how these influence the patient, causing certain effects.

The causes of stress

Considering that different people respond in different ways and emotional a.k.a. psychological stress does cause physical stress also, it's important that you see stress as an aggregate of these three perspectives as illustrated in figure 7: stress = physiological × psychological × sociological.

This relates to the three-dimensional bone-structure of character and orchestration as seen in dramatic writing (Egri, 2004) and psychiatry alike. It isn't just the patient you're dealing with, but also the environment within which the patient grew up and where the patient has lived and is living: family, friends, school, work, and so forth.

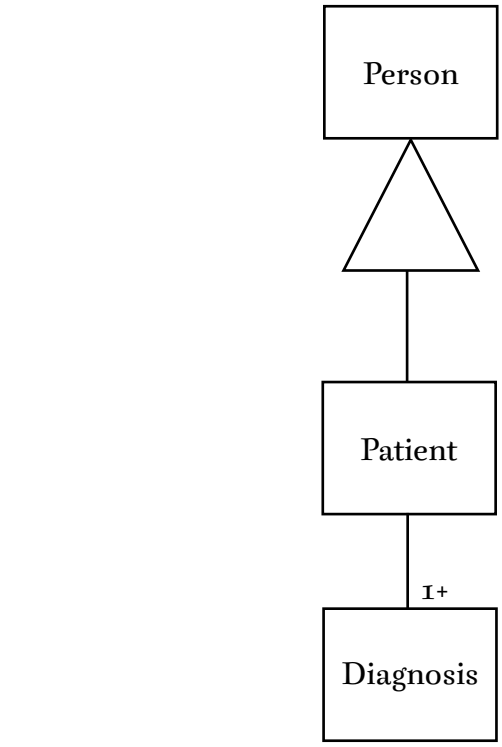

Figure 6 – Persons and patients

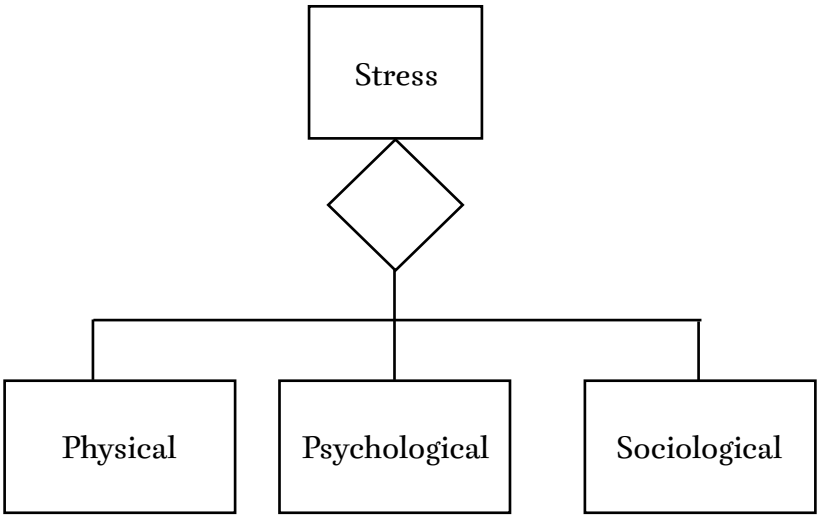

Figure 7 – Three-dimensional stress model

Drugs as a cause for problems

Drugs may also lead to seemingly mental problems, like a lack of empathy, delusions and hallucinations.

Drugs consist of one or more active ingredients, that can either be a stimulant or a sedative, a.k.a. agonist and antagonist. The full range of ingredients, also in terms of the amounts of them and the relative proportions, need to be considered when establishing what's going on.

Figure 8 illustrates that a drug consists of one or more stimulants or sedatives as ingredients: drug = ingredient^{+}; ingredient = sedative | stimulant. Note that when you smoke a herb for instance, it already consists of many ingredients, even within a single cell, as also indicated by the fact that some parts are smokeable and others aren't.

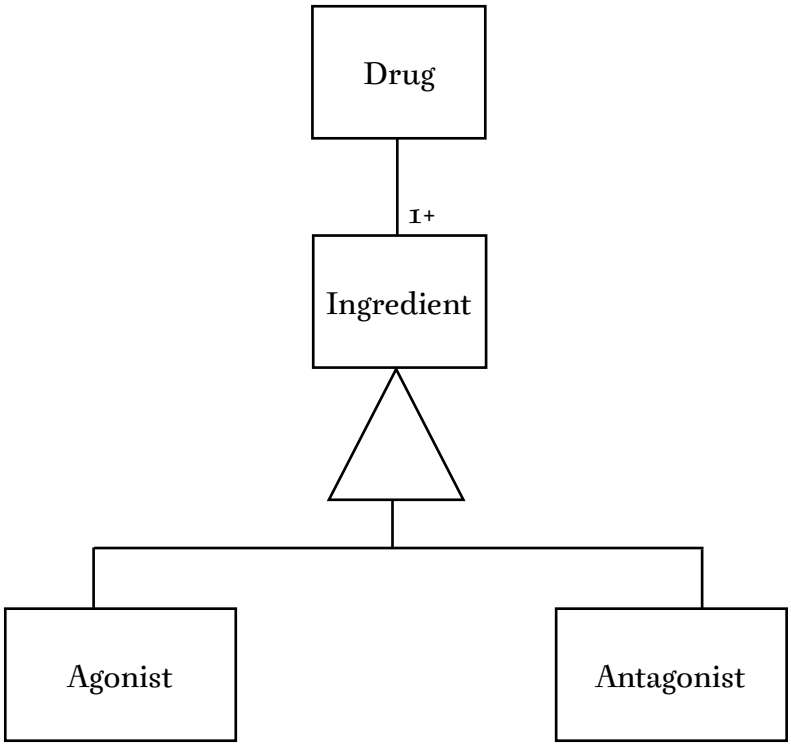

Figure 8 – Drugs

This basically concludes the causes, meaning that we now have to look at the effects.

Effects That May Be Related to Mental Problems

The effects, for it to be counted as a disorder, are reflected in behavior that's either a danger to or leads to the neglect of self or others.

Whether someone has a disorder as such is also bound by legal actions: for instance if specific people with specific perceptions stay out of places where they might become a problem, then they aren't a problem and as such don't have a disorder. Some minds manage themselves in order to avoid disorderly conduct, which is perfectly okay.

When people do have a disorder, this is due to three things that may be either wholly or partially disjunct or fully integrated. Yet the three dimensions to this disorder need to be established separately to see whether they are linked together or not.

On common example is that of Phineas Gage, who has been extensively examined for instance by Antonio Damasio: due to an accident he had to miss his prefrontal cortex. This is a seemingly psychiatric disorder, which in reality it isn't, because it's organic, accidental, leading to the ability to reason logically, but with the actual behavior not linked to said logic, because the actions are fully impulsive.

The illustration I heard in a YouTube video of a Stanford University class was that when you offer them one hand with one peanut and one with five and you explain to them that if they choose the one, they get the five, but if they choose the five they get none, they can reason logically and *say* they will go for the one peanut.

In reality, when they physically have to indicate the right hand, they'll always try to immediately take the five peanuts, which means they have to respond completely impulsively and aren't able to respond rationally in action.

The debate on whether these people are mentally hampered is wrong. It's like a tumor, but now instead of additional mass they have less: it's physical, so an organic disorder.

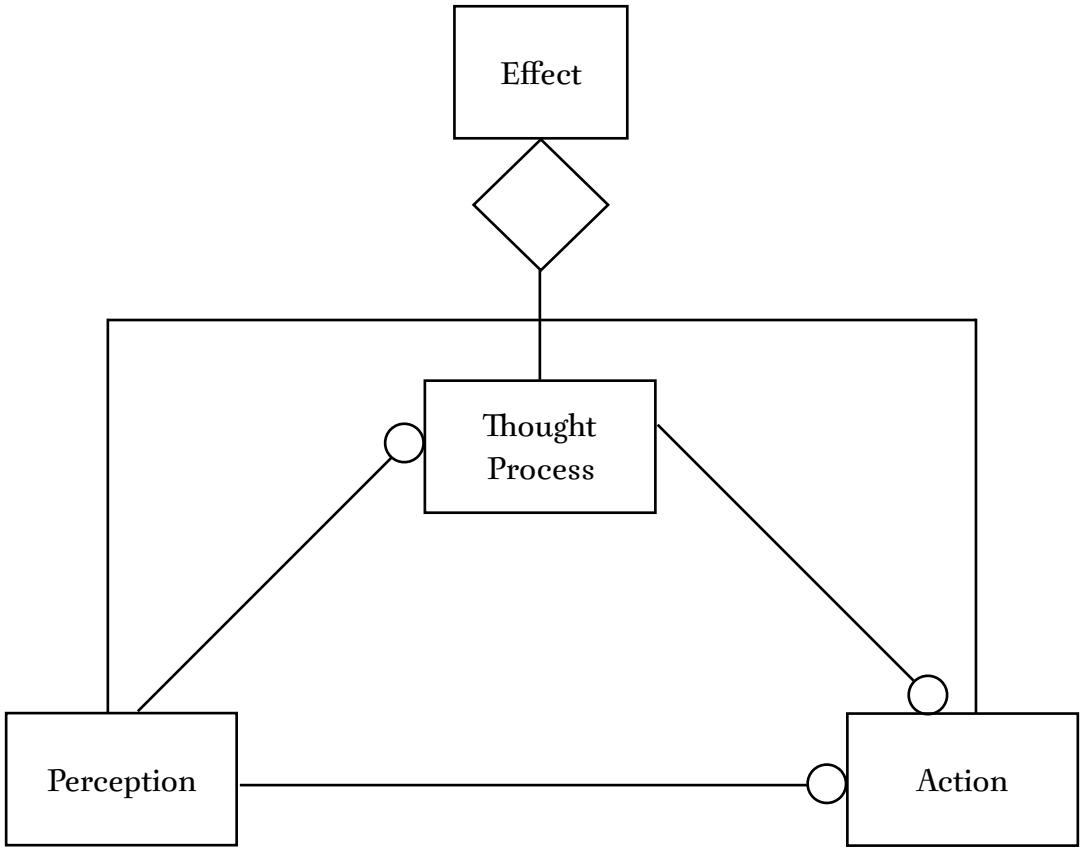

Figure 9 – Effect

As such the resulting image of an effect that's noted as a part of the diagnosis, possibly caused by a mental, possibly physical, possibly drug-fueled disorder or disease, has three aggregate components: perception, process, and action.

Figure 9 illustrates the aggregate relationship and the relationship or lack thereof between the three components: effect = (perception × thought process × action) & ((perception ⟶ thought process) + (thought process ⟶ action) + (perception ⟶ action))

As you can see, the empty circle signifies the relationship being optional. Each relationship can actually have one or more interpretations, but only one at a time.

There may be an *impulsive* relationship directly between the perception and the action, but there doesn't have to be one. It could also be non-existent. Or maybe it's *instinctive*. Then again, it might also be a trained (perhaps by trauma) or untrained *reflex*.

There may be a *rational* relationship between the perception and thought process, but there doesn't have to be one. It might also be *irrational*, leading to interpretations that can't be explained by what was generally perceived. Part of the rational and irrational motivation might be the question what's behind what was perceived.

There may also be a *meditated* relationship between the thought process and action, but there doesn't have to be one. If the relationship between the process and action isn't meditated, meaning that no thought process led to the actual action, then there is no relationship between the two of them at all.

There are different ways of analyzing the whole process, but when all three steps are a part of the perception leading to an action, which even in rational sane beings doesn't have to be the case, it's still easiest to analyze the three steps in the order of perception, thought process, and action.

Analyzing perception

The perception consists of the rational perception of self and the world, and also the *qualitative experience* (Chalmers, 1996) of self and the world, based on which, depending on what urge is stronger, we make rational or irrational decisions. This may actually vary per action we execute.

Qualitative experience means that we for instance don't just discern the symbols or gradients of good and evil (rationality), but also attribute a kind of feeling or content to it in the same way we perceive not just the fact that red is red, but we also have an indescribable inexplicable sensation of it.

Qualitative experience isn't just feeling. Feeling is the qualitative experience of your internal and external sense of touch. Qualitative experience is more than that: it's also the sensation of what you see, hear, taste, and smell. It's the full sensation of all senses generated by the perception of the now, past experiences, and the interlinking of the now and past experiences, as well as the expected future, and it is influenced by feeling.

Considering that connected brain areas that handle the different types of perception leads to synesthesia, this means that we generate our qualitative experience ourselves, because we then for instance perceive colors that aren't there when we hear sound, so our qualitative experience is the follow-up step to our rational perception.

Our rational perception is translated to qualitative experience through us, sometimes also based on past experience, but we can't establish how, since our qualitative experience is the highest logical system we perceive. The fact that memory is important in perceiving the world means this needs to be added as a third factor: a memory of self and the world.

This memory in itself can also generate qualitative experience. Some people have memories of things that never happened, so there doesn't have to be a relation to perception to have a *memory*, much like people are more or less forgetful and don't memorize all experiences. You can also fantasize.

When we talk about memory, we only talk about *short-term* and *long-term* memory, but there are also people without a short-term memory, but they do perceive. In order to facilitate an easily identifiable construct that allows us to link everything together, we also need to consider that we have a *direct* memory.

Our direct memory functions like a capacitor where all of the world's and our own self-qualities enter our system, are loaded up and are fired off once, only for this memory to be immediately replenished with new world and self-qualities.

The one thing that I need to add to that, is that people without a short-term memory can't make any new long-term memories, but this doesn't mean that they don't still have them.

This means that perception is related to memory and qualitative experience, since direct memory is now also a part of memory. Sometimes people experience qualitative experience, sometimes people don't, but they all have some kind of memory. If they perceive qualitative experience, this is also directly perceived as a sixth sense.

Figure 10 illustrates this: perception = memory | (memory ↠ qualitative experience).

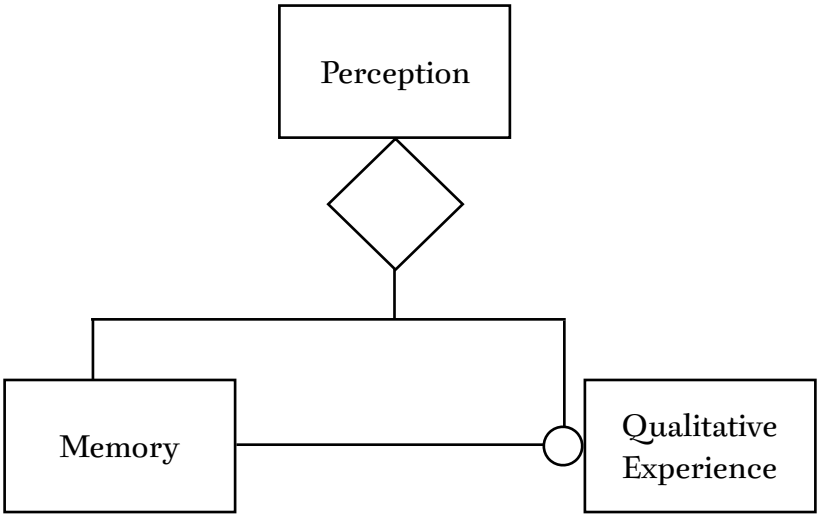

Figure 10 – Perception

Figure 10 doesn't illustrate what leads to perception. Essentially what leads to perception is the world and self, as noted. On top of that the world and self are related to each other in what we perceive as an integrated reference frame.

When you look at method acting (Stanislavski) and mental training (Nowicki, 1997), that both adhere to the same principles, they tend to make use of four reference circles: the inner being your self, than whatever is in direct contact with you, than that what's in your direct vicinity, than what stretches beyond that until the horizon.

Considering that for some people some of their senses are missing, whether you perceive anything at all beyond what comes into direct contact with you is a question that needs to be answered in analyzing this model. What you need to note is even those that are deaf and blind can still feel the heat of the sun. As such we are always in relation to everything around us or we can't live: without a working body and mind, we shut down.

Figure 11 illustrates the reference frame of perception:

reference frame ⟶ perception;
reference frame = (horizon ↠ vicinity ↠ contact ↠ self)

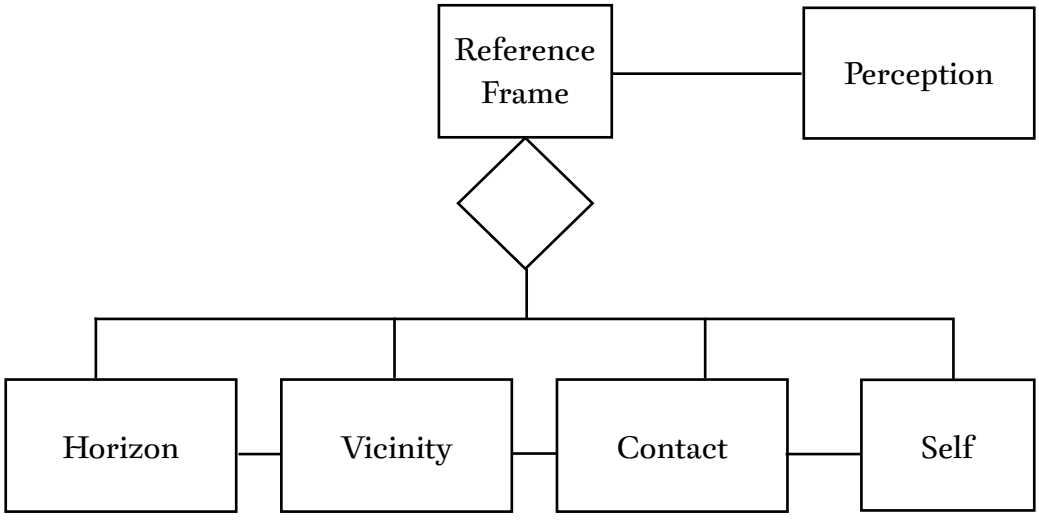

Figure 11 – The reference frame of perception

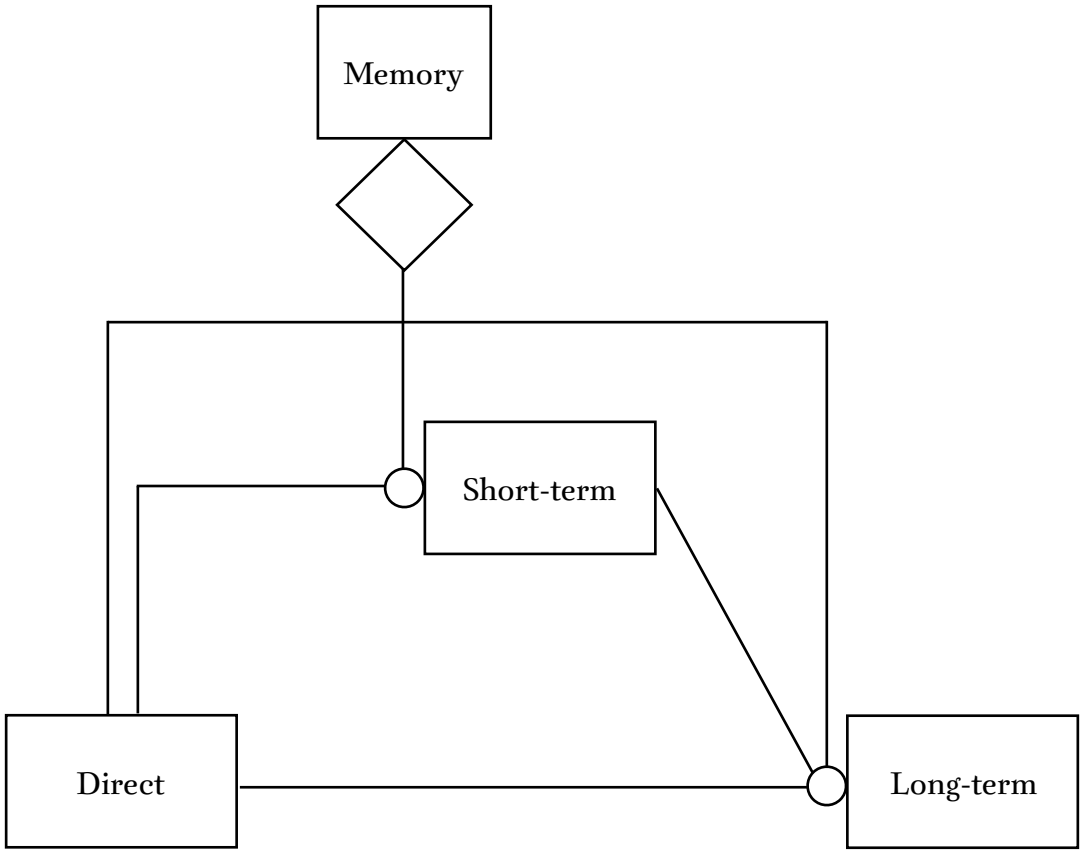

Figure 12 – Memory

Figure 12 illustrates memory, which in logic is relatively complex:

memory = direct
| (direct ↠ short-term)
| (direct ↠ long-term)
| ((direct ↠ long-term) & (direct ↠ short-term ↠ long-term))

Note that in Zen training and philosophy (Sekida, 1999), what's labeled here as direct, short-term, and long-term memory, when also coupled to the resulting qualitative experience can be qualified as the respectively first, second, and third *nen*.

Without qualitative experience, what does it mean to see and to hear?

A computer can't discern the difference between individual senses without us telling it what to do, after which, when it presents to us the results, we need to reinterpret it according to our own senses. What we perceive as experience, the computer can't even see as numbers or electrical charges.

It sees nothing. We see through it.

As such our qualitative experience translates our charges coming in from the different senses to experiences that can through synesthesia also overlap. A human being with properly interlinked senses is even a little synesthetic: what is taste without smell? Our smell for a large part influences our taste and as such we are all properly synesthetic.

There's a myriad of solutions to how our senses do or don't interlink through our qualitative experience. It might hypothetically even be possible that your senses of sight and smell are synthetically related, without you having a nose left. Figure 13 illustrate this with a new symbol, which isn't infinitely complex in logic, but there are too many options:

qualitative experience =
sight | smell | taste | touch | hearing
| ((sight × smell) + (sight ↠ smell))
| ((sight × taste) + (sight ↠ taste))
etc.

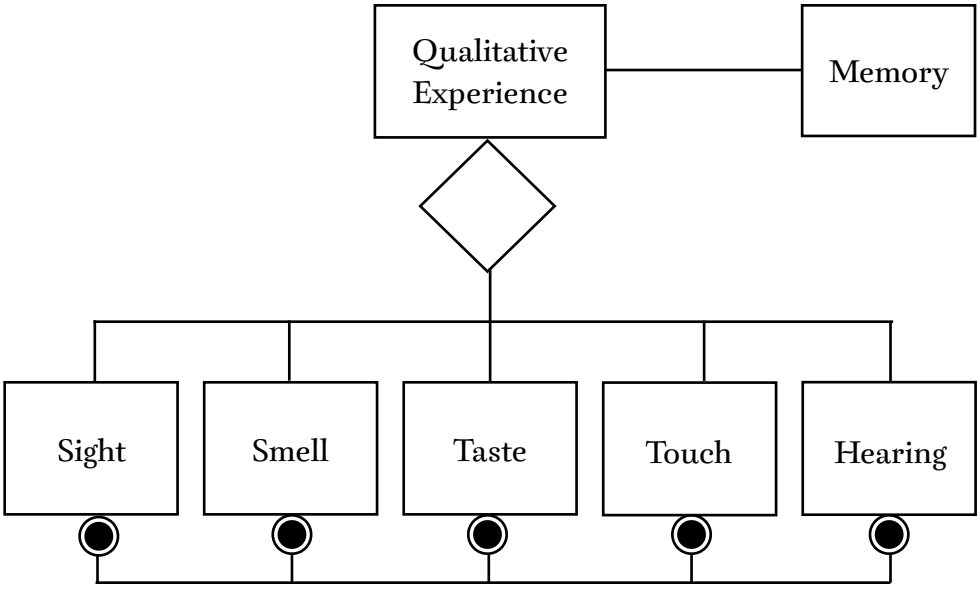

Figure 13 – Qualitative experience

I had to come up with a new symbol, because otherwise all of the possible-relationship lines would cross. The circle with a solid dot represents that there may be a relation for the particular object to one or more of the other objects it's connected with, but there doesn't have to be.

The fact of the matter is that when people have synesthesia beyond needing smell to taste, these senses aren't supposed to be linked to begin with, yet they then are. This introduces a complexity that's difficult to imagine, when you consider all options.

Analyzing the thought process

The thought process focuses on intent: the basic assumptions and rules we use to reason, that may or may not be related to our perceptions. Every human being has basic assumptions and rules based on which they reason, even in the most simplistic way. How these assumptions and rules work is a key component of disorders and diseases.

One might for instance have the basic assumption that everything is related, *jumping* to conclusions. When nothing is related, this leads to *erratic* thought: things just happen because they do. When our thought process is connected to our perceptions, this is called *rational*, since we relate what is related and we see as disjoint what is disjoint.

What leads to action, to destroy things, or to inaction, not to fix things? Some of the above do, but when you assume everything just is as it is, and everything is okay, you're not going to fix anything.

In the same way, some people assume that they are the only one with a problem or that their perception is the only one that's correct. A thought process in more than one way can be *static*, but in all cases people with a static thought process beg the question: the assumption equals the conclusion.

A specific kind of static thought process is the forced thought process, where instead of doing they believe you shouldn't do. It's wrong to note that static is always inactive, it can also be active, so when a thought is static, you have an *active* and an *inactive* kind.

Some thought processes may seem rational to begin with and warrant action, but aren't in reality because the resulting action is *disproportional*. This means that both the rational proportional thinker and the disproportional are *consequential* thinkers, but only the rational thinker is actually right, which requires empathy.

Analytically, a thought process has a *foundation* made up of assumptions and rules and one or more thoughts as represented by figures 14 and 15 respectively: thought process = foundation × thought^{+}; foundation = assumptions × rules.

As figures 16 and 17 illustrate respectively a thought can be consequential, jumping, erratic, or static; and consequential thoughts are rational or disproportional: thought = consequential | jumping | erratic | static; consequential = rational | disproportional.

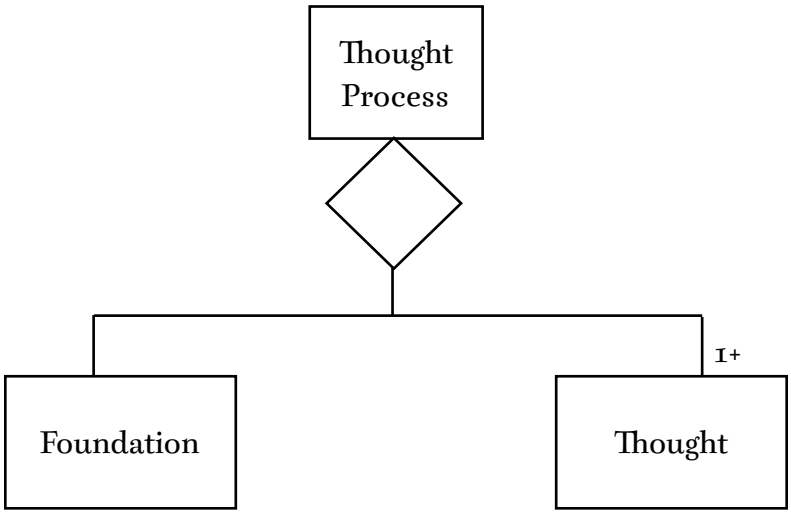

Figure 14 – The thought process

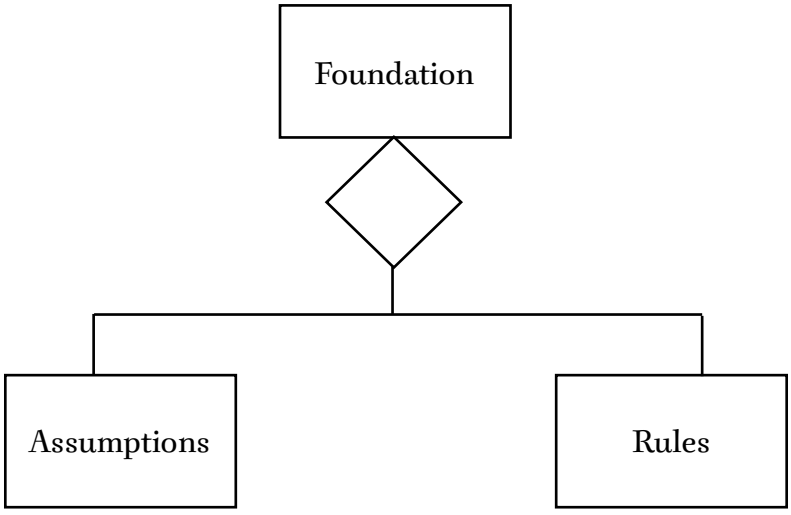

Figure 15 – Foundation

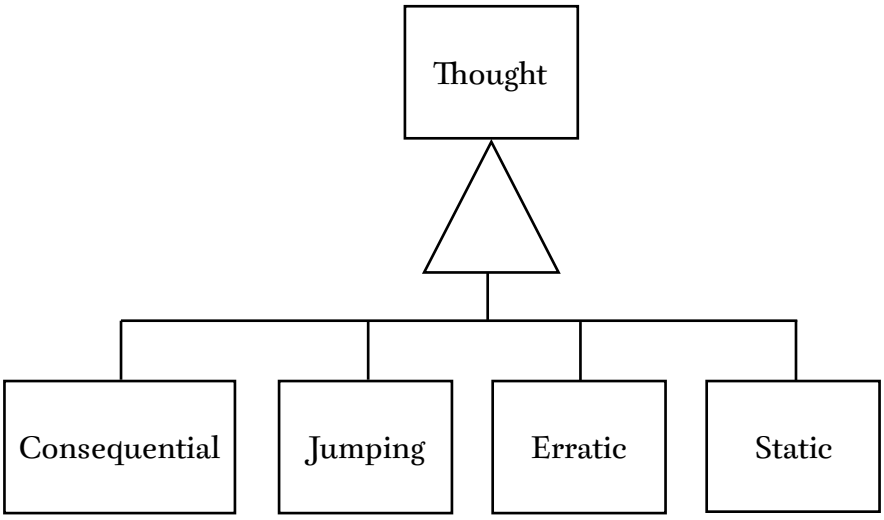

Figure 16 – Thought

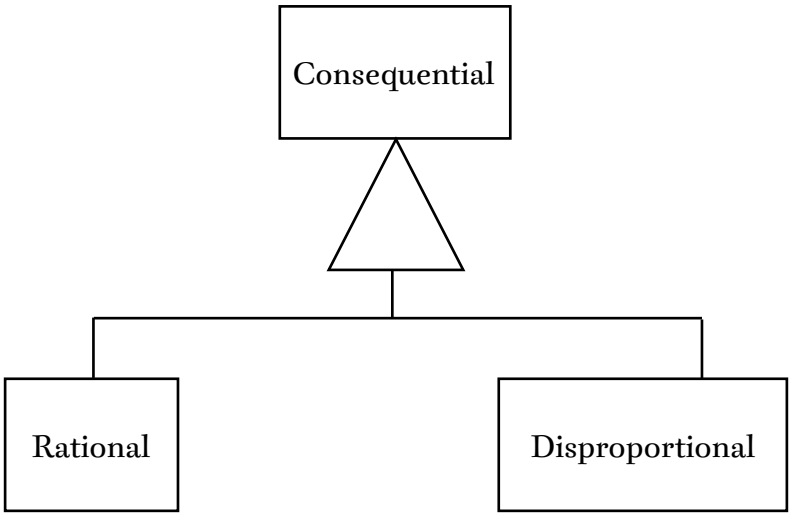

Figure 17 – Consequential thought

Since a lot of disorderly conduct is the result of processes not being present or being disjoint, the personal perception, thoughts, and action integrative cycle can't be written down for all patients as one flow-diagram: specific flow diagrams may be discernible per different types of disorders, but these need to be analyzed individually per patient.

Having considered perception and the thought process, this leaves action.

Analyzing action

Is to speak not an act? In writing, the same dialectical rules that apply to dialogue apply to "action". As such the distinction in terms of action shouldn't be between "action" and "dialogue", but between "saying" and "doing" which are both actions onto themselves.

Come to think of it, there are many more ways of communicating, so *communication* is a better name. You can use physical expressions, including facial expressions. Sometimes people that were considered to be non-communicative turned out to be communicative, so we do need to keep our options open. A more general word for doing is *execution*.

Figure 18 illustrates action: action = communication | execution.

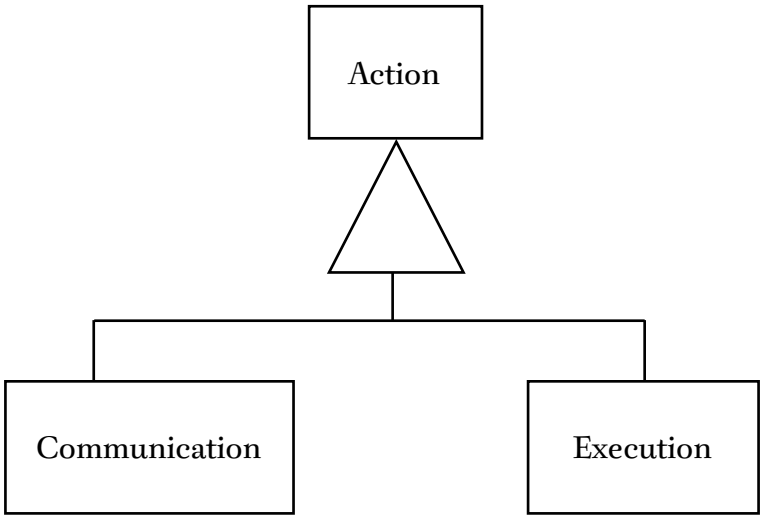

Figure 18 – Action

Should all of This Be Included?

It should be included in the description of the diagnosis. If anything is left out, it will be unclear what caused the conduct and what the effects are to the person itself and the surroundings.

When it comes to the naming of disorders, it should be sufficient to list a list of generic causes and effects. This you immediately need to corroborate with proper argument: rules and perceptions, making use of an environmental diagnosis of family, friends, school, work, and society as well; to see what really caused the problem and what the effects really are.

But generally speaking, you just make a list of generic symptoms. For instance, possible conjunctions might be:

An organic lack of empathy
An organic erratic thought pattern
etc.

... or you might get:

Drug numbed empathy
Drug delusions
etc.

The first patient would be more like a psychopath, for which currently no real treatment exists. The second would be more like a drug addict that also displays a lack of empathy, but for different reasons that can be reverted.

As you can see it's fairly difficult to really name everything based on causes and effects, because some disorders have one cause with many effects, and the totality of the causes and effects make up for every single disorder this person has. This doesn't mean that if it's possible to do so, you still shouldn't.

When it's possible to use "stress induced psychosis" over "schizophrenia", this is better, because it eliminates the prejudice of it being "chronic", which has never been shown to hold. It's also a different thing than a "drug induced psychosis", which makes sure that we don't treat the same effects with different causes in the same way, which would be unscientific.

What Shouldn't Be Included?

Statistics should never be included. First of all, mental illnesses happen as much in any statistically relevantly large selection of people.

Saying Moroccans suffer from what's now known as schizophrenia more than any other group of people is simply racist. They are a country that's part of a large intercultural interbreeding continent called Africa and they form the link between Europeans and Africans.

Christians also feel they speak to "the" God, but in case of the Moroccans, apparently we fail to ask whether it's a physical or a non-physical entity they witness when they speak to "the" God. This is our mistake, not theirs.

There's no viable genetic code for schizophrenia, it's a non-chronic stress induced psychosis and we need to recognize it as such.

Some seemingly mental disorders are actually the result of genetically inherited diseases, but they also have a specific genetic code. Since we're traveling and interbreeding all the time, we can't distinguish between peoples and call peoples after the disease they supposedly have more often. We just need to establish whether the causes are organic or not, possibly through DNA-testing, testing not for skin-color or heritage, but the genetic defect.

The general rule is that a name should be scientifically accurate, inseparable from causes and effects, not just causes or just effects.

Conclusions and Recommendations

It's possible to come up with proper scientific definitions and names for mental disorders, representing the causes and effects of these individuals problems. As such we should. We should also focus on causes *also* rather than *just* effects, when treating disorders. When a cause is non-organic, you shouldn't make use of interventions against organic causes.

What is a disorder and what isn't has been thoroughly established, also in the past. In case of for instance Querulant Paranoia, now labeled Paranoid Schizophrenia or Delusional Disorder, to determine whether you are dealing with a delusional person or not, it's also important to look at their communications (Lester).

People with communications that are typically rational, cohesive, and don't use strange typesetting shouldn't be named schizophrenic or delusional.

Even today, in times of oppression, when their rights are taken away from them, sane people still can be and are institutionalized, even though they are innocent and sane. The fact that we don't look for it allows for it to happen.

When you conduct psychological research to come to a diagnosis, you never do so by yourself. A psychologist isn't allowed to do a lot of the things a police officer does and vice versa. They need to make use of each other's capabilities, abilities, rights, and duties. Above all, they should never be presumptuous and always respect their own limitations.

A diagnosis and its corroboration should always be scientific. An estimate of a possible diagnosis should never be considered an actual accurate diagnosis.

Above all, you need to establish that all of the criteria have been met.

Oftentimes, psychologists and psychiatrists alike label perceptions as *bizarre*, because they argue it didn't happen and it's strange, even though at the same time they acknowledge the perceptions are based on true events, which means that according to the scientific definition, they can't be bizarre at all.

Does psychiatry equal art or science?

I'm a creative director. Art equals both craft and science: it's a practical science with rules, with the only difference of interpretation the very perception you mean to express: realistic, impressionistic, expressionistic, or abstract. The rules are always the same in art.

In psychology, there may be different interpretations to delusions, but the fact that you need to scientifically establish that they are delusions, that people refuse to mend their ideas based on irrefutable evidence of their falseness, is the practically applied rule for establishing that someone has a delusion.

A delusion is that of the patient. Therefore the patient should also express it, not the person that says a person is a patient.

Feedback to the person and from this person to the diagnostician is key in establishing whether perceptions and realities can be and should be attributed to this person, next to searching for and finding physical evidence.

What you can't establish should be labeled as such.

Say you, a diagnostician, have just spoken to the person saying the other person has delusions. Than you have your talk with the person you need to "diagnose". When the person that says the other person has delusions says "Your turn" to that person in with a nasty grin passing that person he or she means to make into a patient?

Maybe you need to reconsider whether the just heard testimony was trustworthy.

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