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Editorial

The Future of Gendercare Game Tests

Up until today we started the creation of Ways & Dreams 1.0 and 1.1 versions, for free download. The child downloads freely the game test from Gendercare.com and plays... but we may not directly receive the results and scores, with the test results, **if the parents did not see....** and surely that interference on the child play may distort some results.

We received alot of results, **the parents** email us.
We need to receive directly the score results from the children play **without adult`s interference.**

That will be our next effort.

To develop Ways & Dreams idea, for online game test playing, and online score emailing to Gendercare for an evaluation with no adult interference.

To achieve that goal we will need alot of new effort, we hope we will be able to develop. We used RPGToolkit editor to develop Ways & Dreams 1.0 and 1.1. That very formidable resource for RPG making may not easily be played online as a multiplayer system.

We will need some time and alot of effort to develop Ways & Dreams 2.0.

We are open for all help you could provide for us.

Thank you,

Dr.Torres
Gendercare Gender Clinic
GIGS GID School

Editorial

O Futuro dos Game tests da Gendercare para Crianças

Até agora conseguimos, com muita dificuldade, desenvolver o game test para crianças Caminhos & Sonhos 1.0, numa versão de RPG simples, que a criança gratuitamente, à partir do site da Gendercare.com pode fazer o download e jogar em casa no seu computador.

Esse sistema tem mostrado ser excelente, pelos resultados reportados **pelos pais**.

Mas os pais são sempre o problema, pois a presença deles interfere no jogo, e os escores podem vir a ser distorcidos, pois os pais têm que ver a criança jogar – o que é um enorme constrangimento para a criança – para depois nos reportar os escores, que certamente nunca representam perfeitamente a realidade da criança, **que é nosso objetivo atingir**.

Pretendemos à partir de agora dar um passo além.

Vamos tentar criar o Caminhos & Sonhos 2.0, online, em versão multiplayer, de forma que a criança jogue conectada à internet, e seus escores sejam automaticamente encaminhados, por email, para a Gendercare Gender Clinic.

Assim, e só assim, poderemos dar liberdade plena para a criança **sozinha na sua intimidade absoluta, jogar e se mostrar de forma plena**, sem qualquer interferência dos adultos.

Infelizmente o software que usamos, o RPGToolkit, que é excelente, parece não permitir a versão online multiplayer, o que vai nos causar dificuldades que podem ser enormes, pois nossos recursos são limitados e nossa capacidade na geração de games, muito limitada.

Qualquer ajuda de game makers é muito bem vinda.

Obrigada,

Dra. Torres
Clínica de Gênero Gendercare
GIGS – Escola para o Estudo da Variância de Gênero

Papers

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Core Gender Identity Dynamics

Dra.Torres, W, M.S., Ph.D.

*GIGS- International GID Education and School
Gendercare Gender Clinic*

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Abstract: In Antiquity until some two centuries ago, gender identity – the way we feel as a boy or as a girl – was considered as derived from the genital conformation only. Later, at the end of XIXth century, Freud, based on some ideas of Fliess, suggested the human baby was gender undifferentiated at birth, and would learn to be a boy or a girl later, seeing the genitals. Some time later, in the middle of the XXth century, John Money accepted as a point of principle, those Fliess and Freud ideas, and suggested the small human child would "learn to be a boy or a girl, as would learn to speak, during the first two years after birth"; he studied those ideas, through observations about hermaphrodites mainly, and some intersex, and he suggested some "plasticity" or some "gender identity indetermination" and those facts suggested him what later he proposed as a general rule, through his "sex of rearing" therapy, that could be applied for all children, because it could work well with hermaphrodites and some intersex. He suggested the transgenitalization and female sex of rearing for David Reimer, when this poor boy, during a circumcision, had cauterized his penis. David had an identical twin brother. John Money wrote papers and books saying about the success of David therapy. Later, Colapinto, Diamond and David Reimer showed, all was a mistake, all was an error, and he never "learned to be a girl" as Money wrote. Later, as a FtM transexual, David ended with suicide. We show here, gender identity is a fact derived from a process, and not a fact only. The fact is the convergence of the process, attracted by an attractor on the topological sense. To understand gender identity and gender identity disorders & variances, we need first to understand the dynamic complex formation of gender identity, mainly due to 5 biological steps, that in humans later may be disturbed by life.

Some facts about old models and new ideas

Let`s see something about the history of gender identity formation knowledge: From Antiquity to Middle Ages and even later, the genitals were considered as Gods that could define gender identity. Fliess and later Freud, at the end of the XIXth century imagined that all children were what they called "bisexual" meaning really gender not differentiated at birth. Later, in the middle of XXth

century, John Money imagined that the child would learn to be a boy or a girl in the first 2 years afterbirth, as they learn to speak.

All those old absurdities & theories suggest gender identity has nothing to do with our brains, and are punctual facts, and not complex brain processes that need time. Our identity is formed in our brains, as Damasio (1994) shows us, and our brains are a very complex system formed after some millions of years of evolution (Eccles (1989)). Also, inside each human being, body tissues, including brain tissues that will generate gender identity possible existence, need time to start (conception and insertion) , develop (gestation) and show the final result as a point of convergence of a characteristic factor we name gender identity: the way we feel as being a boy, a girl or someone with some problems.

What we call here **core gender identity trajectory** is the evolution of gender differentiation inside our body, starting with the chromossomes, then gonads, genitals; the basal brain differentiation and later the cerebral cortex differentiation. All those are 5 biological steps, and surely the first 4 happen during gestation, in all primates, including humans. Later, family, society and culture will complete the work, helping the stabilization of the system, or disturbing it.

The fifth differentiation step we mentioned above happen before and after birth, and will happen during all our lives, and govern our brain lateralities and kind of intelligence, not really gender identity, but surely may disturb if the differentiation put the 4th step and the 5th in another polarization.

Life will complete the work. The environment, the social pressures, the cultural disturbs. Traumas are important, mainly during early childhood, also abuse and violence (they may start PTSD-post traumatic stress disorders & DID- Dissociative identity disorders that may influence life and core gender identity hardly, and even cause self mutilation and self destruction).

Stress and the emotional state of the mother during pregnancy is essential for the 4th stage (differentiation of the basal brain), if not so important for 3rd stage (genital differentiation due to the hardest hormones action) and 5th stage (that starts inside the womb but that increases outside after birth).

That way we may define, not gender identity as a stactic point or one way fact, but as a complex dynamical process in time.

Dynamical processes need an specific and an special topological approach to be correctly understood.

Trough topology we may understand complex trajectories through phase space diagrams and attractor conformatiomns and when the trajectory is oscilatory Also using poincaré sections and

other topological methodology and tools that help to understand complex dynamical system developments. As all complex systems, **core gender identity formation** need a complex approach.

To start the **core gender identity formation dynamics** study, we need to know what we may know about its trajectory in time. To define the trajectory, we need to define the gender values scale and the time scale.

We define gender values scale the space between two polar values, we call 100% masculinity and 100% femininity.

To define time, we use always weeks after conception (really insertion), due to the fact that during gestation (formation, organization) period, a lot of human life has definitions and differentiations, mainly gender ones.

Gendercare gender identity tests/MFX and FMX/ try to research the gender identity at 7, 10, 14, 18y.o. and later ages, and based on those results we could **evaluate the core gender identity trajectories & phase space diagrams & attractors** for researched and typical gender identity formation.

To know more and better about those subjects, we suggest to try at GIGS- GIDSchool Dr.Torres web courses.

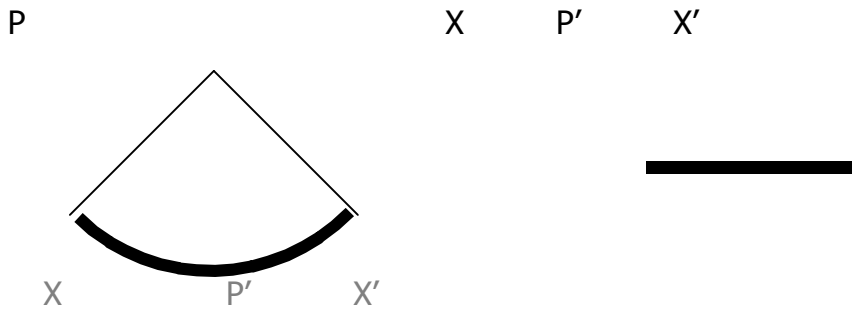
About Trajectories and Phase Space Diagrams

Imagine a perfect pendulum.

Surely that pendulum has no place in our Universe but only inside our Imagination.

The pendulum **trajectory** would be the oscillation between two extreme points of a semi circumference, as between two extreme poles, that viewed from the top would seem a go and come back from a straight line, between the points X and X'.

Point P and P' would be the middle points, where the velocity is the highest, and at points X and X' the velocity would be zero.

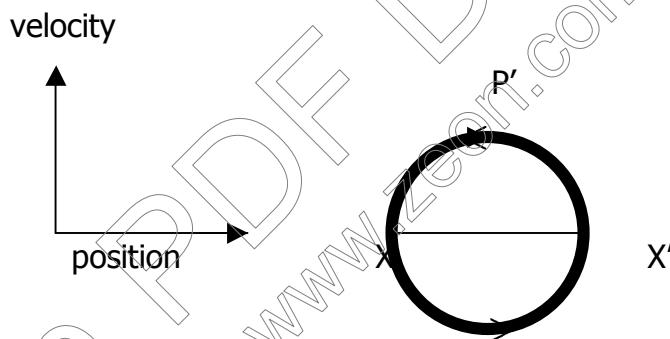


The **trajectory** from the front or the top of the pendulum are clear, but what is the **phase diagram**?

We will plot an axe with the trajectory position (projection of the trajectory, as the straight line) and at the perpendicular axe the velocity of the pendulum. The figure that we plot that way we may ask **the phase diagram of the system**.

As we may see, the trajectory is a function of position and time. The phase diagram is a function of position and velocity, without time influence. Not in our real world 3 dimensions space but inside what we may call "phase space".

For the imagined pendulum the phase diagram would be:



Much better examples you will find on Stewart,I (1989).

It is important to understand that for a cyclic process, with cyclic trajectory, the phase space is a closed , not necessarily regular, figure.

Oscillations are cyclic trajectories, and show closed figures, some regular, some distorted, some very strange figures, and depending on the system stability, and the attractor convergence, we may have big cycles or small ones.

When a formation system converges to one point, flowing to it from the starting point, even if during the trajectory it followed other ways, we say the system converges for a simple attractor, we call a **sink**. The phase diagram of a sink is a point to whom all system is attracted.

If at the start, all flow from the starting point, the starting point is called a **source**.

The phase diagram of the source is a point, from where all diverges and from where all flows.

When the phase diagram has the form of a horse saddle, or as the top of a saddle, from where all may flow to one side or the other, the attractor we name a **saddle**.

Poincaré, the greatest mathematician I ever knew, verified that for most trajectories for most real systems, their phase diagrams show four main **typical attractors** or situations, from where the system flows, or to where the system flows. He named attractors because they were the end of the flow, or the way the system converges or diverges. Those typical **topological flow forms are:**

Oscillations or Periods;

Saddles;

Sinks;

Sources.

Poincaré was a genius of a mathematician. He was the most expert on calculus and mathematical analysis. He was an expert on differential equations solutions. And he soon discovered, even being so good, he was able to solve only the simplest systems.

He was a genius.

He developed the concept of topology, understand almost in that Universe is related to, and functions as an enormous continuous system with interconnections.

He could study, if not solve all complex systems, through their typical phase space and some typical Poincaré sections, derived from process trajectories and flows.

Topology would be the way to understand systems, not to arithmetically solve them.

Not only analysis, but also mathematical analogy.

Topology is good math, but not a way to calculate flows and trajectories.

We may calculate only simple particular cases of simple differential equations, but topology is a math way to **understand more complex flows....** if they diverge or converge... what is the way of that convergence.... what is the stability of the system... from where it comes... to where it goes...

For example, a black hole is a sink.

A quasar is a source.

Genes are sources, always. They start a new life, as a source for the life flow.

Death is a big sink, for whom all life converges.

Genes and quasars are examples of sources and examples of starts.

Black holes and death are examples of **attractors**, to where all system converges.

Typical attractors are: Sink, Saddles, Periods (oscillatory) and Strange.

Topology, or the math of forms, of the continuum of trajectories and systems, was the way the genius of Henry Poincaré discovered to understand and solve very complex systems.

Gender identity formation, after a lot of genetics, psychoanalysis, endocrinology, neuro-endocrinology, molecular biology, etc, etc... I think we agree, is something complex... and need those complex systems approach to be well understood.

Kawamura (2000) and others are trying to develop methods to understand basal brain gender differentiation through fMRI for alive humans. That is a very important research, but that answer, as the Amsterdam Brain Research Institute (Kruijver et al (2000), Zhou et al (2000), Swaab et al (1995)), will give us sure data for only one moment in that process, we name the step 4.

Step 4 define not, alone, core gender identity, but surely is the most important step for that definition, among others.

What we need to understand is:

1. Gender identity is a life process, for all organisms, mainly the most developed ones, as primates, and among them, human primates;
2. Core gender identity is a biological process, for all mammals and also for primates.
3. Human core gender identity determined by our biology, may be disturbed, reinforced, destroyed by human social and cultural life.
4. What we may and need to know are the structures: biological, social, cultural structures and mechanisms that are important for core gender identity formation, and also social gender identity or gender roles formation.

Gender bipolarity

That is almost one unanimity.

In Brazil a wise man said: all unanimity is a kind of imbecility.

Gender is not only bipolar.

Bipolar are the limits where gender identity develops, and where male and female attractors exist.

Let's imagine what may happen inside those male and female limits. A lot of trajectories may develop inside those two poles as two limits.

As the pendulum, that had its trajectory between two limits.

For the pendulum, X and X' were the possible trajectory and phase diagram limits. For gender, M as the perfect male sink attractor or perfect male source and F female, we may imagine that those polar limits define a gender space.

Trajectories and phase diagrams will be limited by those two poles.

Gender Identity (I) will not be limited by those two possible perfect attractors, but will exist as the convergence point of the trajectory for each human being, between those two poles. It may stabilize as a sink attractor in between those two poles, may converge to a period, small one, big one (big oscillations), well determined or strange.

The shape and polar characteristics of the attractor say a lot of the convergence and the energies involved on its formation. Attractor shape and phase space diagrams say a lot about **core gender identity** stability.

The 5 biologic steps of gender development

We would like to consider, at least, the 5 main biological gender differentiated steps to define gender biological trajectories (remember those 4 first steps happen only during the gestation, or the first weeks of life after conception; the 5th starts also during gestation but continues after it):

1st. Step --- Chromossomes;

2nd. Step --- Gonads;

3rd. Step --- Genitals;

4th. Step --- SBN – social behavior network inside the basal brain (hypothalamus, amygdalas, lymbic system, corpus callosum);

5th. Step --- CC- cerebral cortex cognitive characteristics, and latteralities;

Where

M --- Source and/or Sink as male attractor;

F --- Source and/or Sink as female attractor;

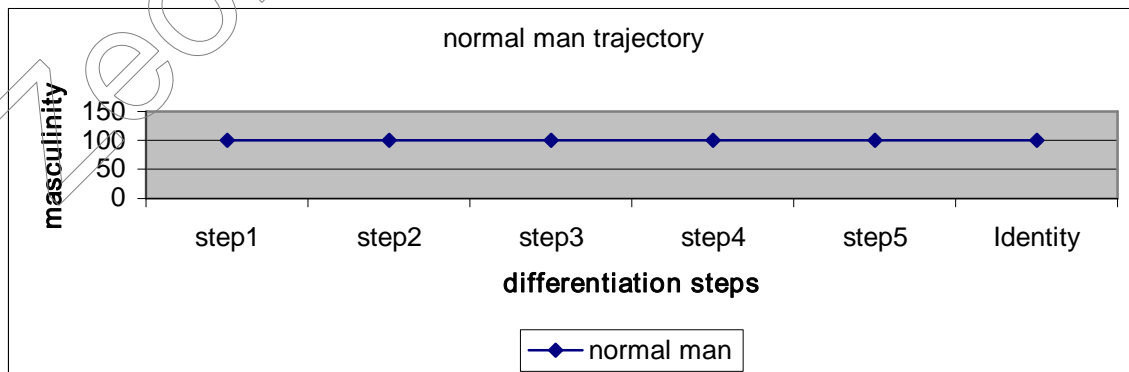
I --- Sink, Period (oscilation) or Strange as gender identity attractor; sink when stable without oscilation, period when unstable with some oscilations; Strange when totally unprevisable and chaotic. The position of the attractor inside the gender space, if near a pole or not, is very important for stability considerations.

(as a dice, that have 6 stable faces, and only those 6 stable positions as stable attractors, the core gender identity has only 2 perfectly stable situations: male M or female F. As far from a pole is the attractor, less stable it is)

Simple trajectories and phase diagrams

Some simple examples:

For a normal man, or better saying a PERFECT MAN (imagined, exists not in that Universe), the 5 steps trajectory would be a perfect polar trajectory, as the next figure shows.



The figure shows, the gender trajectory for a normal man, from step 1 to step5.

All the biologic system converges to the same male attractor M.

When biology starts as simple male source and later always converges for a sink male attractor in a normal and stable way, probably all other life actions will effort to increase the strenght of the attractor (that plot means the "perfect man", absolutely complete in masculinity; the real normal men have some oscilations, some are more sensible, some are more hard, some oscilations are always possible in real systems).

For that trajectory the phase diagram will be very simple, the simplest possible: a simple point.

.M

To that blue M point all the system converges, in the most stable way.

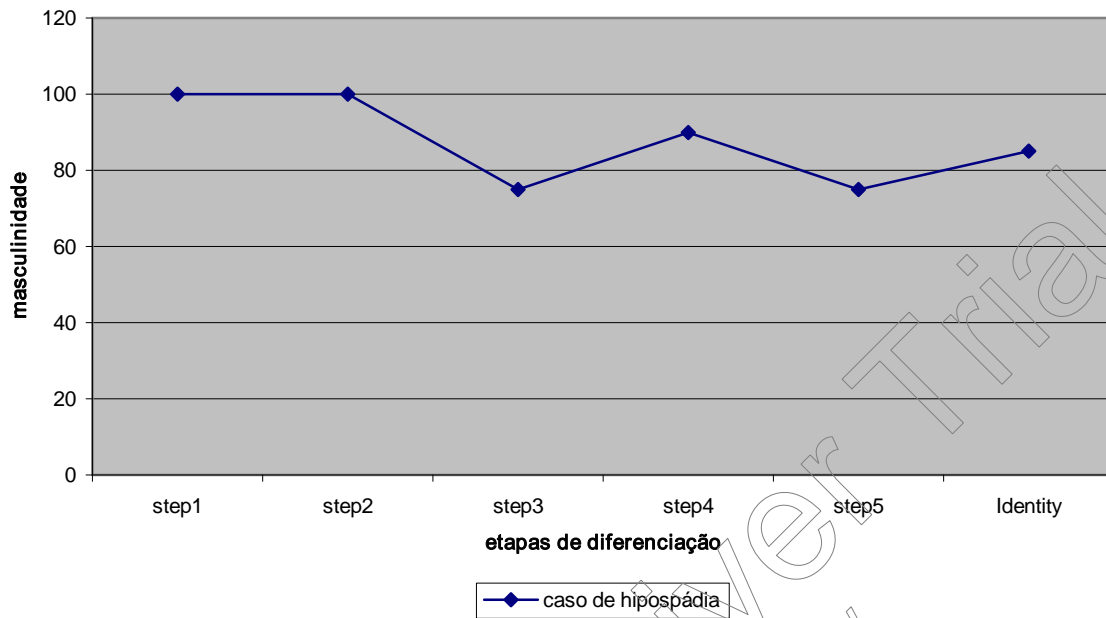
Vice versa for the F female attractor for the female trajectory for women.

After those 5 biologic steps, all social, familiar, cultural factors will try to reinforce the attractor M for men and F for women.

A not so simple biologic example

Now our example refer to an intersex simple situation we call hypospadias. Gender identity I will be near M, as a period of very small range, and very near the M perfect sink attractor.

Trajetória em caso de hipospádia



Step 1 and 2 may be perfectly male, but for any cause, step3, 4 and 5 may be a little bit far away from the perfectly male. Steps 2 and 3 we may surely know through the gonads and genitals, step 4 we may evaluate through test MFX and step 5 we may consider related to step 3 (theoretically). The phase diagram would be:



We may see that the original source of the gender flow is M. Some time later, due to some factor, surely biological, the system flows to a near M identity, but not necessarily perfectly M. Also that attractor may be a sink or even a period, with small oscilation, we may say almost no oscilation. Probably it will be so near M that we will perceive not any lack of stability on the male attractor.

The 5 biologic steps are not always sufficient to define gender identity and mainly gender roles

We have sufficient evidence that there are those 5 biologic steps for gender identity formation. I will not mention again all the work from Dörner in Berlin, Gorski in California, Pffaf in New York, Swaab in Amsterdam, and also Bonsall, Michael, Resko, Roselli, Clark, Newman, Ogawa, Kawamura, Zhou, Kruijver, Phoenix, Docke ... and much others, about the existence and some important characteristics about those steps (at the bibliography we show some dozens of references, all very important).

Those 5 steps show we are not "blank pages" that life will write over. Gestation is the most important moment of our systems formation (what we know today about stem cells show us gestation is the formation and organization most important step of our lives; later our first childhood is the second most important moment), and it exists because we are not blank pages at birth.

As our perfect pendulum, that exists only in our imagination and not inside the real Universe, the blank page at birth, as the "bissexuality" or gender no determination of human children at birth that **Fliess imagined and Freud agreed**, also is only imagination and has nothing to do with the real World.

Life has some billion years on Earth. Primates, as other organisms, are the present day most complex systems that started some billion years ago. Life has its trajectory on Earth, and primates are an important manifestation in a moment of that history or trajectory.

Humans are primates derived from other older primates. We started our derivation from *Pan trogloditas* some 4 to 5 million years ago in Africa (Horai et al (1995)), and *Homo sapiens sapiens* exactly as we are today started in Africa some 200000 years ago.

So, we carry in our genes all that history or trajectory (our stem cells confirm they know that story, day after day, inside our labs).

On the contrary, we never could be a blank page, even at our most early start... we start with our genes, a complete potential system, and a dozen of stem cells that know all the old trajectory, and our genes, where we have all our history or trajectory, what obviously will control our formation. Genes are the project and stem cells are the material how that project will develop and be erected. All our tissues inside our body or hardware were in that project. But the body is more than a project, it is a reality, that develops inside the mother`s body in primates, inside a mother as inside an environment, receiving influences and suffering the consequences of the mother`s life.

In the sixties and seventies, Dorner discovered how the emotional state of the mother could disturb the phetus body formation, that affects including some brain gender differentiation systems, mainly the basal ones, that need to be differentiated early inside the womb for the baby protection.

So, humans are not blank pages at birth.

Culture started, glyphs started as hieroglyphs some 10 thousand years ago in Africa (and cavern pictures started in South Africa more than 100 thousand years ago), near the origin of the Nile river, a long time ago...

That so long history determines our genes, and our genes determines the project for our tissues, our bodies and our body formation inside the environment of the womb. That primate and human project (natural project as a consequence of Nature, or not, that is not so important), need to be established, and during it at least 5 different moments of gender differentiation we know today (but I hope there are others):

1. Chromossomes;
2. Gonads;
3. Genitals or "Sex";
4. Basal brain (SBN);
5. Cortical brain (cognition and latterality...)

For non human primates those 5 steps **DEFINE GENDER IDENTITY**.

Important note: Stoller & John Money, and followers, considered that "only humans have gender identity", as if it was a cultural, and not biologic property.

Antonio Damasio (1998) showed all organisms, mainly most complex ones and all primates have a **core identity** determined by **biology**. Only humans possibly have cultural identities, but gender identity is related to **core identity** and never cultural identity. **To be male or female is a question of CORE IDENTITY** and not only sex or genital configuration as Fliess and Freud thought nor a question of cultural identity as gender roles, as Money and followers tried to put as a point of principle.

The first 4 of those biologic steps happen inside the womb **for all primates, human and non human.**

The 5th step start during gestation but continues after birth for almost all life, for human and non human primates.

Other mammal species, as rats, have only the first 3 steps during gestation, and the 4th starts during gestation and ends perinatally. They have almost no 5th step.

For no human primates, the 5 steps **define core gender identity.**
For other mammals, the 4 first steps **define core gender identity.**

Does human primates be completely defined by those 5 biological steps to define **core gender identity and cultural gender identity?**

Surely not, we are much more complex than that.

Human primates, even if those 5 biological steps define in a **harmonic way core gender identity, all flowing to a sink as a simple attractor, life factors may disturb that system.**

Those disturbs will not change core gender identity, but will disturb it. A simple sink attractor may be disturbed and show period characteristics and unexpected lack of system stability may happen.

The polarity will never change radically, after established; but life may introduce disturbs that will start deforming the attractor, for less stable situations. Eventually, if at the right direction, external influences may be a helper to stabilizes the attractor (mainly naturally not well polarized attractors)

Non human primate species have no way to disturb core identity from others... with torture. Torture is a human specialty and expertise.

Steady State

The great master that study systems stability is Prigogine (1978,1993).

Prigogine had in Brussels, Belgium, his PhD in Chemistry and there he was awarded with Nobel Prize.

Why a system is stable or not?

Stability is related to energy, and also stability disturb is related to energy.

Stable attractors need a lot of energy to be disturbed, as the dice. 6 positions are 6 stable attractors.

Let's remember our perfect pendulum. It is perfect, so it is not real, it may not exist in that Universe, but only in our mental imagination, as a virtual object.

Our perfect pendulum never has energy **dissipation**. As a pure mental pendulum inside our imagination, as the virtual pendulum, the perfect one, **he is not a dissipative system**.

In that Universe, all real systems are dissipative. What says it is the second law of thermodynamics.

Our bodies are dissipative systems. We need food and oxygen to live, and without their energy we may not survive. We have a body temperature control, we need energy to maintain.... our **steady state**.

Virtual mental systems, to maintain a steady state need not energy, only imagination. Real systems in that world need energy to achieve and maintain steady state.

After the 5 biological steps, core gender identity is formed, and will be a steady state if it receives some energy to continue, and receives not more than that necessary energy, to be distorted and disturbed.

In that real world:

No energy, the system dies, because all real systems are dissipative;

Enough energy, the system remains in a steady state;

More energy than for steady state, the system may start, as a pendulum, to vibrate or oscillate;

Much more energy, may happen the imprevisibility and chaos (deterministic) or any sort of stochastic anarchy.

The body needs water, food and oxygen to maintain steady state, or near steady state condition (dissipative systems may become old and old systems may die).

The core gender identity needs energy to be a steady state.

That energy is provided by:

1. **Inner polar convictions**, derived from the own core gender identity attractor **position in gender space**, and
2. **Environmental conditions**, that may help or disturb the nature of the individual.

Inner polar convictions energy

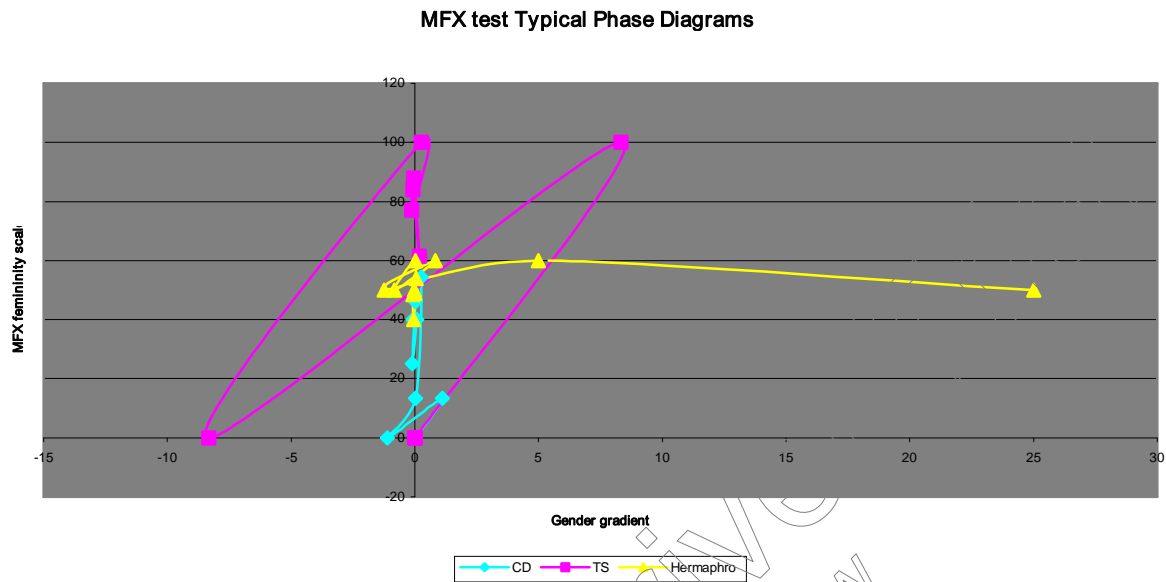
What is the main factor that determines when someone has more or less inner convictions as inner energy to stabilize core gender identity?

Polarity.

Polarity means inner conviction.

More polarity, more inner conviction, and vice versa.

When the phase diagram shows the core gender identity goes to a near polar, even oscillatory attractor, in harmony with the genitals or in discord with them, then with polarity inner convictions have energy and strength.



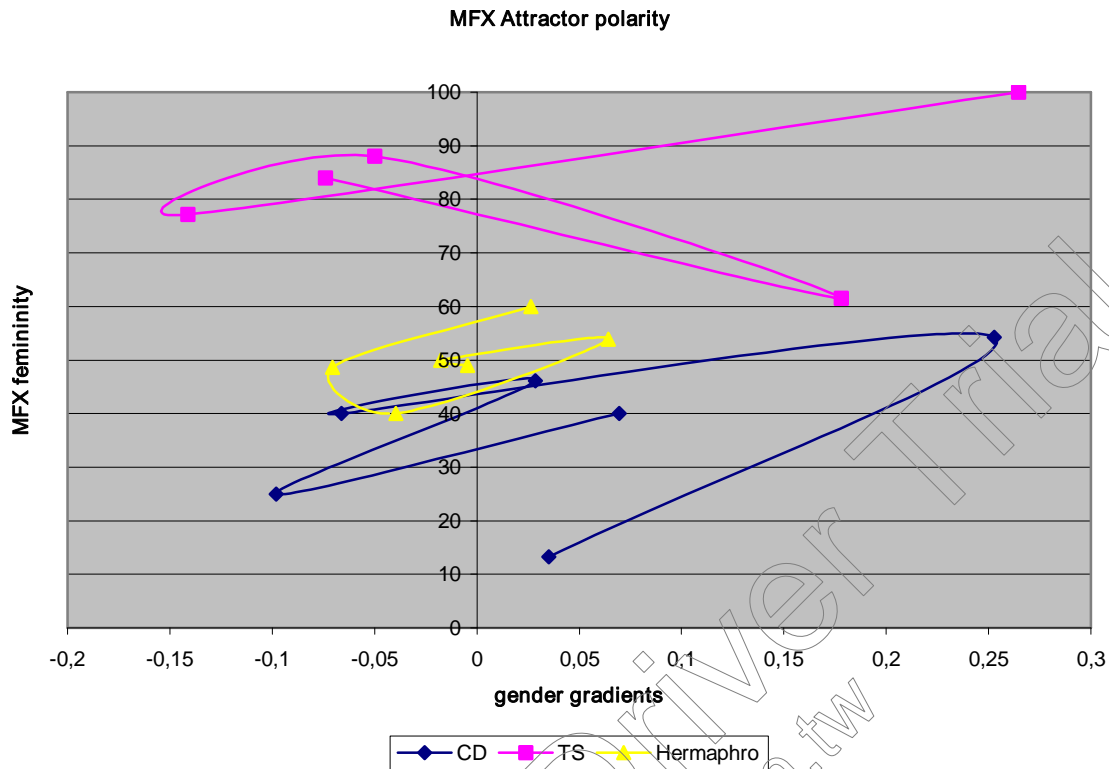
That MFX test Phase Diagram plot for typical situations: Yellow for a hermaphrodite; Blue, a crossdresser- CD (MtF) and Rose a transsexual- TS (MtF); show that for the CD the gender identity flows from the male pole (0% femininity) to near the same pole (almost 25-35% femininity). Even with some oscillations, the polarity is maintained, what means a lot of inner conviction energy. For the TS, even with a complete discord from the male original source (0% femininity) and some attractor oscillation, the attractor has a polarity, as a female attractor (75-85% femininity), so a lot of inner strength. The hermaphrodite, naturally, has almost no polarity (in that example source considered as 50% femininity), or a very weak polarity (in most cases) for the attractor (see at Colapinto (2000) a lot of examples of that lack of polarity on hermaphrodites and some intersex conditions), that here range between 40 and 60%. That means very few inner energy or inner conviction. They need more external help to polarize (self centered polarization, with the patient inner conviction as the main decision always, and not the doctor or parents convictions). CD's and TS's need no help to define their polar directions, they need other kind of external help.

So, more polarity, more inner conviction strength. Need less external help to polarize.

Polarized systems as we may see in the next page the attractors, TS (female) and CD (male), need no external help to polarize. External influences may be a danger, a problem or a torture.

Not well polarized systems as the hermaphrodite example, surely will need **some wise help to polarize in a patient centered way.**

All three situations have internal oscillations and some lack of stability. They need some energy (inner energy when possible) to stabilize as a steady state.



Steady State and System Stability

Some conditions of steady state are stable, others may be not so stable.

As in the "Jurassic Park" movie, some systems may be working as a steady state, but may also be near "the edge of chaos", when a small amount of energy will disturb and develop a disaster. An accident, a coincidence, a "fatality"... natural systems always follow the more stable path way. Artificial interferences (as in the movie the dinossurs) may easily generate unstable situations.

Some steady state systems are very stable, in other words, we need alot of energy to disturb the system, and almost no energy to maintain the steady state.

Imagine a dice, a perfect one. It exists only inside your imagination, obviously, as our pendulum. The dice is over the table, in a stable steady state. As we said before, it may be 6 possible stable positions. It will be there for eternity (a real dice would, after some thousands of years, surely deteriorate due to 2nd law of thermodynamics), if you disturb it not. If with your finger you touch the dice, almost nothing will happen... a very small amount of energy, the dice continues with the same number over the top, in a steady state.

Now you throw the dice over the ground, and the steady state is chaotically, even anarchically disrupted, because alot of energy was over it. Nobody knows what would be the new number at the top of the dice (if you imagined a honest dice).

But we know the dice will stop over a face, but never over an interface.

Why?

Why always the dice stops naturally (the real dice) in one of the 6 stable positions, over one face?

To stop as a steady state over one face is much more stable (and more probable) than over a possible interface. The stability increases the probability for an event to really happen.

For the dice, to stop at an interface between two faces would be absolutely unstable. Almost no energy would be necessary to put it over a face, at a stable position. So, it would never stop over an interface (at least in the almost real world we are imagining now – in Hollywood movies, all possibilities may be probable).

Core gender identity formation is a question of 5 biologic steps, and the result of that process trajectory or history will be, **at the earliest infancy** a core gender identity biologically determined, and will end natural and biologically **in the more stable possible attractor, as the most probable attractor.**

For all non human primates and also other species, the biological natural more stable attractor is the final possibility. For man, that biological most stable attractor may be **considered not** as the most social and cultural more stable attractor.

Polarized attractors are more strong and stable. Sinks are more stable and strong than oscillatory periodic attractors.

Nature is wise. Culture may be sometimes wise.

The systems were naturally (genetic and endocrine) prepared to easily polarize in one or the other pole. But some 1 to 2 % of the human population (some intersex and almost all hermaphrodites) have not naturally strong polar attractors, due to genes and hormones, acting in all tissues, mainly in the brain, mainly the basal brain. For some of them, the natural biological more stable attractor may be the non polarized one...

Polarized or not, in an harmonic way with the genitals or in discord with them, to maintain that system as a steady state we will need some energy.

That energy may be provided by inner energy sources or environmental energy sources.

From where comes inner energy to reinforce core gender identity?

As we said earlier: inner conviction due to polarity.

Inner conviction will depend on the core gender attractor polar stability.

A simple sink attractor, polarized one as male or female, will need less energy to be stabilized as a steady state, and on the other hand will generate big inner conviction or big inner energy.

The system will be a stable one (as the face of the dice), and will be difficult to be disturbed by outsiders and environmental, cultural factors.

Sex of rearing, tortures, exclusions and banishments will be very necessary to disturb that core gender identity very stable attractor.

But if the attractor is polar but not so stable, as a pendulum, as a period, then **inner conviction will be weaker** and the system would need more energy to stabilize as a steady state, that the inner conviction, perhaps, could not supply, or could supply only with a lot of effort, or pain.

Here, sex of rearing and other environmental interferences **may help or disturb** the possible steady state of the not so stable system.

When the external interference comes **in the same direction of inner convictions** it will help to stabilize core gender identity.

If it comes at the contrary direction, then it will disturb the system, and all the system may collapse.

Some core gender identity systems are very unstable, and others are very stable.

The more lack of natural polarity, the more unstable is the system and require a lot of inner energy to stabilize, and the person may have not that natural inner energy provision, most of the times, mainly when small children.

They need some help from outsiders.

Here the gender therapist may help.

Or may be the worst enemy.

Help to flow the same way the patient needs to flow.... obviously that way always the therapist action will really be a help. Polarize the wrong way is the worst that may happen. Find the natural polar tendency is the main work of the couple patient-therapist. That need to work together to discover the natural inner polar tendencies for the patient.

Torture, aggression, counter directions against inner convictions, always start a collapse of the system.

Sometimes, on some occasions, we may not call that action as a therapy, but as a fake therapy.

Gender core identity collapse means self mutilation and self extinction.

John Money sex of rearing errors

Money studied mainly hermaphroditism and mosaicism.

He imagined that hermaphroditism would be a limit condition, and if something could explain and be good for true hermaphrodites about gender identity formation, that could be considered as a general all humans explanation.

For his ideas, hermaphroditism was a so radical biological disturb of gender differentiation, based in all the genetic of the victim, that if something explained that so radical condition, would explain almost all human conditions.

I hope I will show you that was his main error.

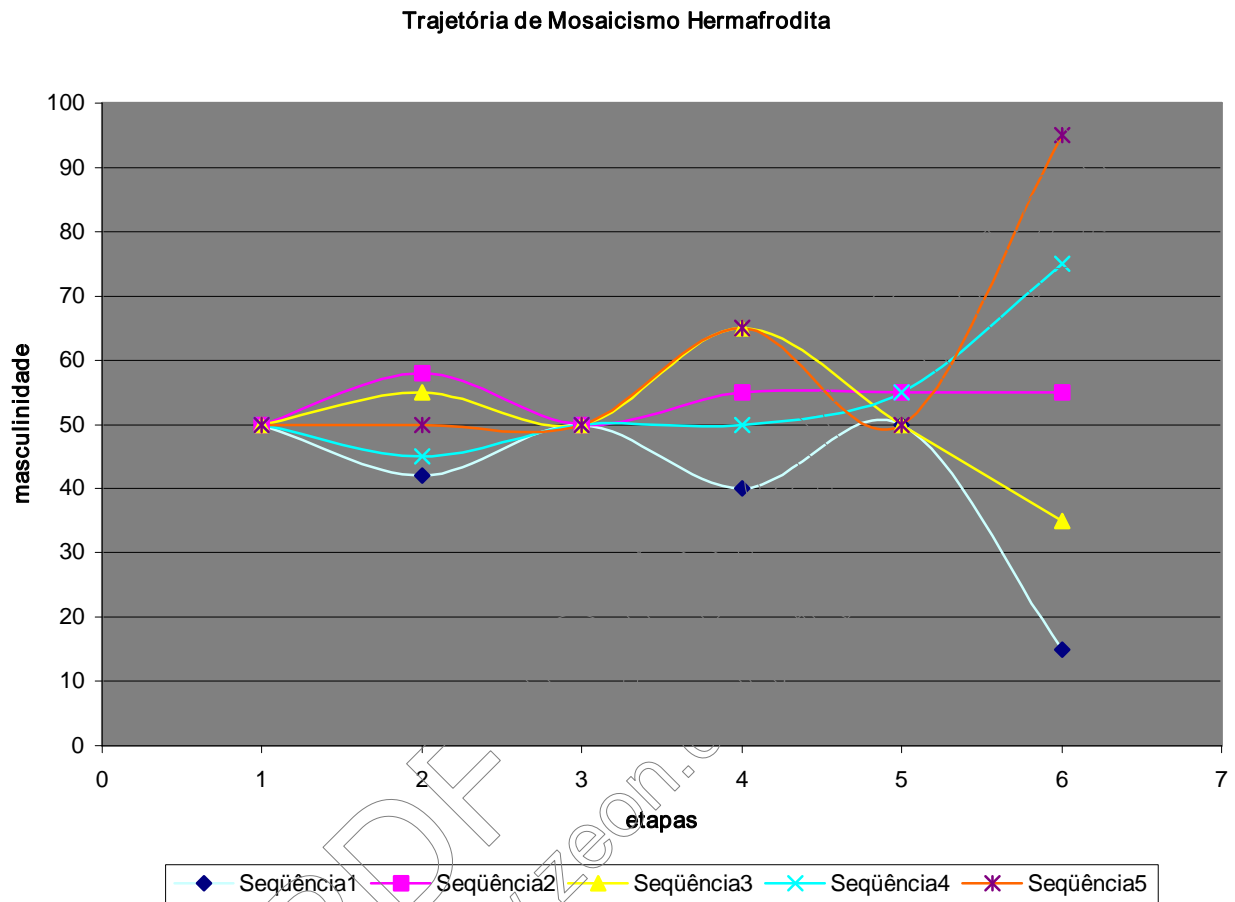
Fliess had the idea that all human child have no congenital brain inner gender differentiation. Freud, agreed, and as an important authority, spread Fliess ideas, **with no scientific evidence.**

Money, impressed by Fliess and Freud, recognized in hermaphrodites that possible inner (really brain) gender not so defined differentiation. Some plasticity, as thought Fliess and Freud as an all human characteristic, in the most radical gender problem with biologic evidence in the root of the genes, Money recognized.

His mistake was to, **without scientific real evidences, but based on what others said and what he thought,** consider that hermaphrodites were gender plastic as Fliess and Freud considered all human children, and generalize that plasticity for all humans and not for (some) hermaphrodites only.

Let's consider mosaicism typical history or trajectory, for the 5 biologic gender differentiation steps:

Let's consider 50% of the chromosomes expressing male and 50% female characteristics:



To really understand core gender identity formation, we need to in depth understand those **typical core gender identity formation trajectory plots**.

That is a typical true hermaphrodite core gender identity trajectory plot.

The five biologic steps, as typical hermaphrodites, show a lot of uncertainties, and be spreaded among the Male /Female polarity.

Hermaphrodites, due to genetic factors mainly, show at birth genital uncertainties and gonad uncertainties or duplications. Not two testicles or ovaries, but one testicle and one ovary, etc.. The same for the genitals, both tissues, male and female, remain and develop, completely or some parts.

Genes are the project of the whole body. Hermaphrodites have those problems **surely in all body tissues**, not only gonads and genitals.

At John Money times, and Fliess and Freud`s, inside hermaphrodites bodies, only the first 3 steps were considered. The 4th and 5th step were ignored.

Due to Descartes` philosophy, humanity considered, and some still consider, a radical ontological split between the material (body), or "res extensa" and "res cogitans" or the immaterial (mind), as if they were absolutely and ontologically not related nor intertwined.

That is not true.

Body, through the brain and brain relations with body and environment, generates mind. Brain generates mind, and identity is a part of the mind, it is a virtual reality (obviously, virtual mind, in contact with environment, internal and external, reacts and may interfere psychosomatically over the body). Biological core gender identity is not imagination, but a part of the reality, because virtual, derived from the mind, that was derived from the body, the brain.

Brain is body.

So body and mind are intertwined, and to try to radically split it is a great mistake (see Damasio (1994)).

Descartes was a big philosopher, but not a god. Sometimes he made some mistakes. Willian James (1890) and later Damasio (1994) explains alot of them.

So, if the hermaphrodite has radical genetic problems that generates core gender identity problems, it generates possibly gender problems **for all body tissues** , and not only gonads and genitals.

Brain is a complex body system.

Alot of good and serious research shows us, since the 50`s and 60`s, that brain tissues are gender differentiated. Alot of good research work on neurobiology, molecular biology, show genes (some 54 genes) and sex hormones (DHT,T,E2, etc) act to **form and ORGANIZE brain tissues during all primates gestation, INCLUDING HUMANS.**

Some 20 years ago, the important American researcher Dr. Pfaff, Ph.D. from Rockfeller University in New York said:

All the times that an hormone acts during the formation of a tissue (gestation IS formation and organization), we would like to understand that something hormone related is necessarily happening (when he studied 3H-estradiol and 3H testosterone on rats and non human primates brains) .

Most of times we may not know precisely what was happening, but we may be sure something is happening, and something gender differentiation related.

Alot of good work in Atlanta (Bonsall & Michael et al); Oregon (Resko & Roselli et al); New York (Pfaff et al); California (Gorski et al); Amsterdam (Swaab, Kruijver, Gooren et al) and mainly Berlim (Dorner et al) about primate`s brains were developped, and show us the existence always of, AT LEAST, more two biological steps, the most important ones, for **core gender identity formation** in human and non human primates.

The hermaphrodite trajectory show us:

Step 1. Chromossomes:

The typic hermaphrodite of the diagram, was almost 50% male and 50% female in the chromossomes. That is example only, alot of variations may happen. Exact quantities here are

impossible, but what is important is to have a good estimation of rough probable values estimations.

We may not evaluate a value directly, but we may evaluate it through what happened with gonads and genitals.

So we plotted a 50% masculinity at the step 1 in our example trajectory.

Step 2. Gonads:

The gonads need not necessarily to be exactly 50 male and 50 female. We show some possibilities, so the step 2 value may be any in a range of values, let us say, 25/75 (M/F) or 75/25 in the same scale.

Step 3. Genitals or sex:

Genitals are more external and more visible. As we defined the chromosomes value based on the genitals, those values would be considered here more or less the same.

Step 4. Basal brain SBN- social behavior network, as defined by Newman (2000):

How would be the SBN? Nobody may know. **But we may know something very important: the SBN will be not very well polarized and very unstable.**

Why?

The basal brain tissues that are included in the SBN defined by Newman in 2000, were basal ones, subcortical ones, as hypothalamus, amygdalas, stria terminalis, until the corpus callosum.

Bonsall & Michael (80`s) and Resko & Roselli (80`s,90`s), Clark et al (80`s), showed us **non human primates** show alot of T action, through AR and ER over those tissues, forming, organizing them (Phoenix et al (1954) started those ideas, studying guinea pigs brain gender differentiation). They show also two important facts:

T action is important on those systems, and only on those systems in the brain.

DHT has almost no action on those systems in the brain.

All T action on the basal brain **happen during primate gestation.**

For the hermaphrodite we may consider that step 4 and steps 1, 2 and 3 are not so much related, since even for no hermaphrodites, they are not so related and some discord may happen.

Surely an almost chaotic step 4 probably may happen, **and surely the step 4 attractor never will be a polar sink, but surely a non polar period, of "amplum spectrum" probably, and probably a "strange attractor", due to probable chaotic possibilities.**

Step 5. Cortical brain CC:

DHT acts during gestation and after gestation on cerebral cortex tissues formation.

In the 90`s, Kimura showed how that hormone action over the cortical brain develop different cognitive capacities as typical characteristics inside male and female cortex (our 5th step).

Later Gooren started some research over brain cortex lateralizations and cognitive characteristics for "transsexuals".

As, in hermaphrodites or not, the genitals **and the brain cortex are differentiated by DHT** (we know not if in the exact same way, but through the action of DHT over AR on both tissues), we consider step 5 related to step 3, to plot our trajectory.

At the example plot, **step 6,7... means future.... means life... probably a faraway future... as the attractor of core gender identity.**

For hermaphrodites, step 6,7,etc... as the future attractor, may not be determined, but SURELY WILL BE:

NOT NATURALLY POLAR;

**VERY COMPLEX;
UNSTABLE;
AND SURELY NOT A SINK BUT A PERIOD OF HIGH RANGE;
or even a strange attractor due to a chaotic situation.**

That is a situation of very high instability, oscillations, possible ruptures with reality.

At John Money's eyes that was the best situation possible, for his ideas and Fliess and Freud's.

He perceived hermaphrodites are manageable with little effort from the environment (their core gender identity system need a lot of energy to stabilize, and their inner convictions produce almost no energy... they need desperately some external help...). He could manipulate hermaphrodite children easily to **"teach them"** to feel male or female, because they did not feel really male or female naturally.... naturally their core gender attractor was oscillating, with almost no polarity and no stability.

What were Money's conclusions?

Gender identity is something suggestionable, plastic.... we may mold it from the outside.

If even for hermaphrodites that works, why not would it work for others? Freud considered that plasticity a human characteristic!

That was his great mistake.

Not all humans were hermaphrodites, and surely we are not blank pages at birth.

So he started his "sex of rearing" therapies, not with hermaphrodites (where it may work, not perfectly but as a possibility) but with all human primates.

For hermaphrodites the sex of rearing theory could be a helper, surely.

The sex of rearing hard methods: torturing, imposing, in a very authoritarian way were very bad, for sure, but the idea of a sort of external help for core gender identity polar stabilization for hermaphrodites was (circumstantially) a good one.

That could even be the CORRECT IDEA FOR HERMAPHRODITES, but considering his BAD authoritarian METHODS, surely his therapy would end as a fake therapy, mainly at the eyes of the patients even if not at the eyes of his brotherhood of "experts" and followers.

Surely generalize that bad idea to all human primates would be a great mistake, that would generate a lot of victims.

In the 40's, 50's, the ethic values were in a very low level, mainly considering children... and other minorities and powerless classes of persons.

For all possible patients, among them including hermaphrodites that almost always need some external good help to polar stabilization or even non polar stabilization when necessary and the best personal option, the sex of rearing methods were very outrageous. But as we showed, hermaphrodites, almost always need an external help to stabilize in a more fast and easy way their systems.

Their core gender identity typical trajectory shows it, and a lot of them told me it! They would like some help.... but no oppression or authoritarian "help".

Respect, respect, respect... that is the magic word to open doors... respect for others, and all external help need to be centered on the patient self point of view.

Surely **patient centered therapies** could be the help hermaphrodites surely needs. They need respect and help, never oppression.

External help is welcome... oppression is outrageous

To torture children and babies, is very easy.

To respect them is much more difficult.

To torture and oppress them, we need only to be older and stronger than them.

To respect them we need to be older and wise.

Knowing the **typical core gender identity trajectories**, and the **typical core gender identity attractors** it is easy to know who need our help and how we may try to help:

1. As the genitals are important in our society, and through the genital conformation we will be considered, including our names, someone with genital malformation need some help (intersex and hermaphrodites);
2. As intersex (sometimes, for example on PAIS conditions) and hermaphrodites may need some external help, what kind of help would they need? **Help to polarise and help to stabilize the polarity and oscillations.**
3. Sex of rearing was an aggressive way to try to polarise, nor respecting the ways and directions of the patient (not patient centered therapy) but based on what would be better for doctors and parents. That was a big error. But the patients need some help to polarize and stabilize.
4. Some intersex conditions as CAIS (complete AIS) and 5-alfa-reductase or Imperato McGuinley syndrome, polarise naturally to the female (CAIS) and to the male (5-alfa-reductase), even with a mele source. The help is not so necessary, mainly after puberty and some necessarily body corrections (always patient centered, please!)
5. As genitals were considered as gods that could define gender identity, so all humans that self identifies in a not expected way need some help, as GID` s and GIDNOS (transsexuals, crossdressers, transgenders & other gender variants)
6. They need not a therapy for good polarisation. They need some help to correct their bodies (TS,TG) and to live and survive in an aggressive society.
7. Normal gender polarized humans may need some help, when live and love in a not so common way, as gays and lesbians. They have no medical nor psychical problem, but could call for some help, due to society pressures.

Help is not oppression, manipulation, induction, violence or torture.

Help is always patient centered.

As we saw, for hermaphrodites, as they naturally develop a very oscillatory and not hard polarized core gender identity, and not enough inner energy to stabilize it, they need some external help.

From the parents, family, therapists, doctors, friends, law and society. We hope we are civilized persons to really help them when they need.

What kind of help?

1. patient centered;
2. Always considering the patient desires;
3. Waiting the patient show its desires for a polarity;
4. Helping the patient to stabilize the desires;

5. Helping the body and mind of the patient to stabilize around those core gender identity desires;
6. Be prepared for possible failures as oscillations;
7. Respect the patient if he/she loves the oscillating life. For an hermaphrodite THAT REACTION IS NORMAL!
8. Take care with body "corrections" they may be, later, a nightmare for the patient;
9. Respect, respect, respect;
10. Some more respect.

John Money generalizations and radicalizations surely would end on some catastrophic situations. To try to "proof" his ideas, he would need an important victim, and an emblematic one. A normal boy twin, two identical twins, where one was mutilated at the genitals at 8 months after birth, and the other suffered nothing was the opportunity he was waiting. He could manage them and try to proof his ideas, and write about it and be the most important scientist about gender!

That was the origin of the catastrophe.

David Reimer (or John/Joan)

The Reimer family was a Canadian family and they had identical twins. At age 8 months, they took their children for circumcision. The surgeon that performed those surgeries, perfectly performed the first boy, but cauterized the penis of the second. The penis tissues were all destroyed.

The parents were desperate.
What could they do to help their poor boy?
They looked for help.

The help came from US.
John Money, the great gender authority, suggested them to use his sex of rearing therapy with the not well gender differentiated child, that, with a female transgenitalization and castration (the gonads would be eliminated), would learn to be a beautiful and happy girl.

They believed.

They called the boy as Brenda.
Dolls, beautiful dresses, all rose... Brenda would be a normal happy girl.
The authority said.

Time passes and Brenda felt a very strange girl... she took female hormones... but she never felt as a real girl.

At 14 she knew the truth.

He desperates.

Immediately he never more accepted to put women`s garments.
He would like to call himself David and never more Brenda.

He tried to kill the surgeon that erased his phallus, but did not trigger the pistol.

He sent away the pistol in a river.

He stayed isolated for years, suffering something we may not know how deep he suffered.

One day he came back, concious that someone had made him a FtM transsexual looking for a sex reassignment program.

He tried some surgeries, with no success... if he still had his original testicles, he could have a better chance... but someone one day said it would be better to eliminate his gonads...

Later, as a FtM transsex he married Jane. She had 3 children. David worked hard in a slaughter-house.

Later, Dr.Milton Diamond,Ph.D. found and met him. He told the truth. Milton Diamond wrote a very important paper calling David as John/Joan. Later John Colapinto wrote one important book, telling the world the fake of Money`s methods, and the reality that John/Joan was David Reimer, and his story. That was in 2000.

Later David`s brother died.
David lost his job.
David divorced from Jane.

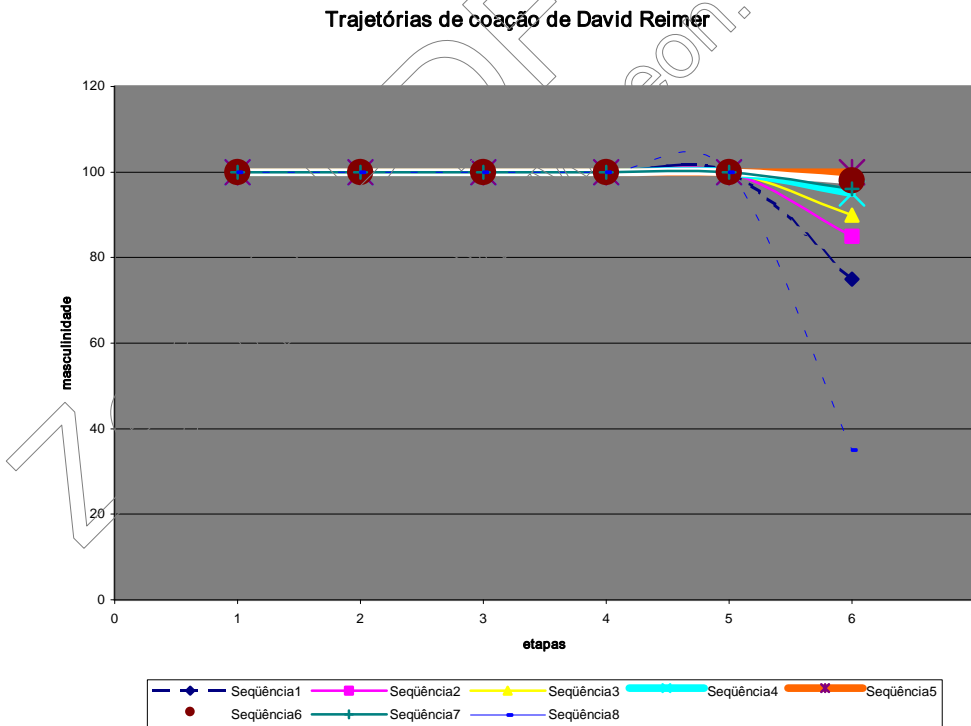
David Reimer triggered the pistol that time... David took suicide.

David was not an hermaphrodite. He had not a core gender identity with unstabilities and labilities.

Violence could not help him. Only destroy him.

David`s sex of rearing therapy ends with his suicide.

David Reimer`s core gender identity formation had that kind of trajectory:



It is totally different from a hermaphrodite situation.

All five biologic steps that define core gender identity were male, in a straight and hard way, with no unstabilities or labilities. The attractors of all steps were perfect polar sinks, with a male nature.

Hermaphrodites show they need some external help to stabilize core gender identity, but David Reimer was not an hermaphrodite! He was a normal male boy, with no biological labilities of core gender identity formation.

To help David, the best way would be:

1. Do not put him in danger of cauterization;
2. Do good surgeries and no penis cauterization;
3. Try to preserve what remained intact... the gonads... try to recover all penis tissues and all penis structure possible... nowadays, to try to develop stem cells technology to recover and generate new tissues, including genital tissues;
4. Wait.... and respect the boy... and with him try to find the best solutions;
5. Take care with the bad surgeon that made the first big mistake... you will need not to shot him.... as David did, send the pistol to the sea... but take care with circuncisions and bad surgeons...
6. Take care with bad gender therapists and fake therapies.

Obviously I would not know if David would be more happy, and if he would be alive today. But surely we would be more honest with him.

That trajectory plot shows us, torture and oppression of small children seems to work for some time (terror is an efficient therapy, mainly to oppress the child, the weak, the poor).

But later we will see that torture and oppression never works well.

David history show, sex of rearing therapy is not a valuable therapy, but a fake therapy, even for hermaphrodites for its methods, and for all human primates for its theoretical mistakes and points of principle.

But David`s history shows that torture and oppression may turn unstable a core gender identity even well polarized naturally, what was stable.

I think that is the most important conclusion about sex of rearing fake therapy.

After torture, manipulation and oppression, David oscilate. He was a baby, he was a small little mutilated boy.

But in no way, coation, oppression and torture may be considered a therapy.

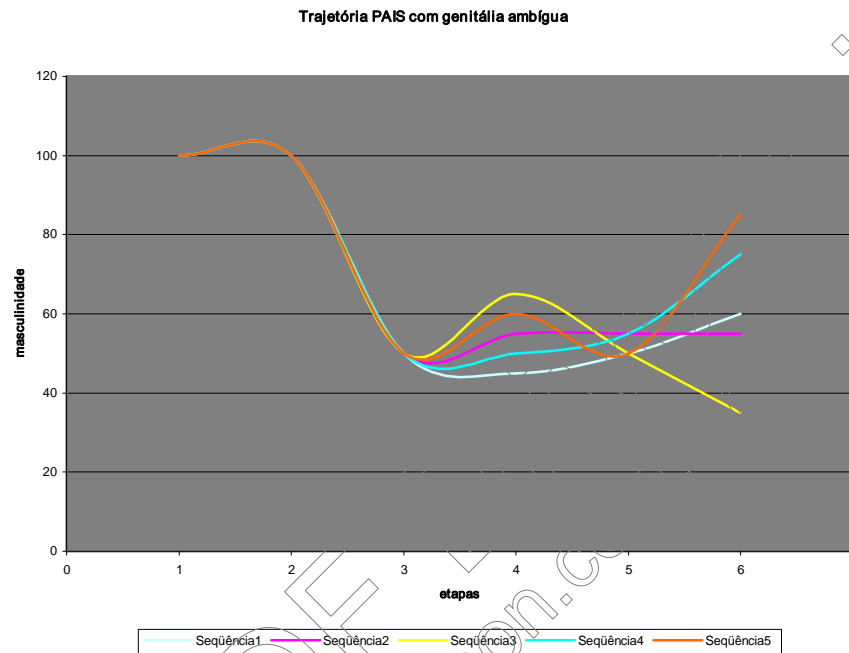
Hermaphrodites need some external help to stabilize their core gender identities **as they may desire.**

David needed not external help to manipulate his inner feelings, but he had the desperate necessity to be helped by someone to correct his mutilated body.

But even until today, some consider sex of rearing a good option... surely not for themselves or their children... and surely that is not the opinion of patients... but the opinion of their oppressors, the "experts" that call themselves "gender therapists" (as doctors, psychologists, with academic graduation as MD`s, PsyD`s and even PhD`s).

**PAIS androgen insensitivity syndromes and other
intersex are also vulnerable**

PAIS core gender trajectories may be almost as variable as hermaphrodite trajectories. Also they may be very complex and unstable:



Let's consider that example typical situation.

The step 1 chromossomical source is completely male.

Step 2, for the gonads, is also absolutely male, as a polar sink.

The lack of good androgen receptor gene on chromosome X (due to any sort of AR mutation; see Gottlieb et al (1998)) start a partial androgen insensitivity syndrome-PAIS, and the step 3 we name genitals or sex will be malformed, due not to a lack of good DHT hormones, but due to its weak action on cells and tissues, not organizing them in a complete male form.

So, the 3rd step or sex or genital step will stay as an intersex. To try to evaluate a quantification for intersex step 3 we suggest the use of the Quigley scale (see Quigley et al (1995)). In the trajectory plotted here, at a more or less 50% male, 50% female level.

What we would have on the 4th step on the basal brain differentiation?

Nobody knows.

Kawamura et al (2001) are trying to develop a fMRI method measuring some corpus callosum angulations, to define more male or female basal brain structures, but they have only preliminary (very interesting) results (and some lack of resources to continue their research, unfortunately).

As we said before, what we know is:

At the basal brain, DHT has no important rule for its organization. The main factor is T-testosterone, through AR (so the PAIS situation surely will interfere here also) and through aromatization and E2 action (estrogen action), derived from what some 40 years ago Dorner from Berlin called the estrogen paradox, because T also masculinizes basal brain acting through aromatization (T transforms in E2) and acting as E2 on ER (estrogen receptor), MASCULINIZING the basal brain.

That paradox, in other words says that, during gender differentiation of the basal brain, T and E2 masculinizes the ORGANIZATION of basal brain. Later, after birth in primates, E2 feminizes the OPERATION of the basal brain.

Later Ogawa & Pfaff showed, studying rats without ER receptor action (Er knocked out- ERKO), that aromatization is related to core gender identity but mainly with aggressivity characteristics and behaviour. So core gender identity is related more to AR action than ER action.

We need some indirect ways to discover what happens in stage 4.

The Gendercare tests (MFX for MtF unexpected femininity evaluation and FMX for FtM unexpected masculinity evaluation) evaluate those values, indirectly.

Here what we may recognize is **step4 attractor for PAIS situations surely is not so polar, unstable, oscillatory** and never a well defined polar sink.

Where is the middle point of that period attractor (polarity), its shape (typical attractor conformation) and spread (oscillatory range) ?

Those values Gendercare gender identity test evaluators evaluate with a lot of precision (for each patient), but not as a direct measure, obviously.

At the example, we suppose some oscillatory shape and spread, to show how it works.

Step 5 probably may be considered as similar as possible with the step 3 genital situation, because both are determined by the action of DHT over AR. The difference is the genital process is much simpler than the cerebral, but the same value for the example is a good evaluation.

What will be the attractor of that trajectory?

We may not be sure, but we may say:

1. It will not be perfectly polar and not a polar sink;
2. The core gender identity will be a little bit unstable, due to the overall instability of the trajectory, **mainly step 4.**
3. The core gender identity attractor will be a polar/non-polar period, with some oscillation and a middle point. We may not know where is the middle point (polarity) and the amplitude of the oscillations, without a good system evaluation (we use Gendercare tests for that evaluation)
4. The core gender identity attractor will be less unstable than the hermaphrodite typical, because that system is not so much unstable, but may be also a lot not so polarized, so needing some energy to polarise it.
5. The inner energy of self recognition **increase in relation to hermaphrodites** due to the more simple, and stable attractor and a little more possible polarisation (that depends on the particular intersex situation).
6. The intersex (PAIS or other situation) person will have some inner energy to self identify (that will depend on the specific intersex cause and situation), but in some limit situation. Surely it will need some external help (help not as sex of rearing oppression, but help to self definition of its own ways)
7. No surgery of intersex babies may be justified by parents or doctors. It is important to wait the child shows its own tendencies, and then help the child to follow its own ways.

8. Genital surgeries, only after the child intensely ask for it.
9. Respect, respect, respect. Center the evaluation on the patient.
10. A little more respect.

Intersex obviously need some help.
Not oppression. Help. Help for self definition.

Important note:

Intersex has a large diversity of possible factors:

CAIS; PAIS; MAIS;

Some specific syndromes (5-alfa-reductase deficiency; adrenal deficiency, etc)

They typically generates different specific polarizations and oscilations, so they need specif knowledge and specifi help, for core gender identity stabilization (polar or non-polar- that is a patient centered question) and also for body corrections (never as babys, but also patient centered help)

CAIS patients always are female polarized, 5-alfa-reductase male polarized, MAIS most of times male polarized, PAIS depends on the particular situation... etc.. etc.. etc..

GID- Gender identity disorders

WHO-World Health Organization recognizes, on its document ICD-10th version (International diseases code), GID classification, derived from APA-American Psychiatric Association norm DSM-IV.

Harry Benjamin International Gender Dysphoria Association-HBIGDA at its SOC-6th version (Standards of Care) recognises also the same ICD classification for GID`s.

At ICD-10 GID is classified as F.64, and includes:

Transsex (TS) as F.64.0 and F.64.2;

Crossdressing (CD) as F.64.1;

GIDNOS (among them transgenders-TG) as F.64.8 (GIDNOS means Gender Identity Disorder Not Otherwise Specified).

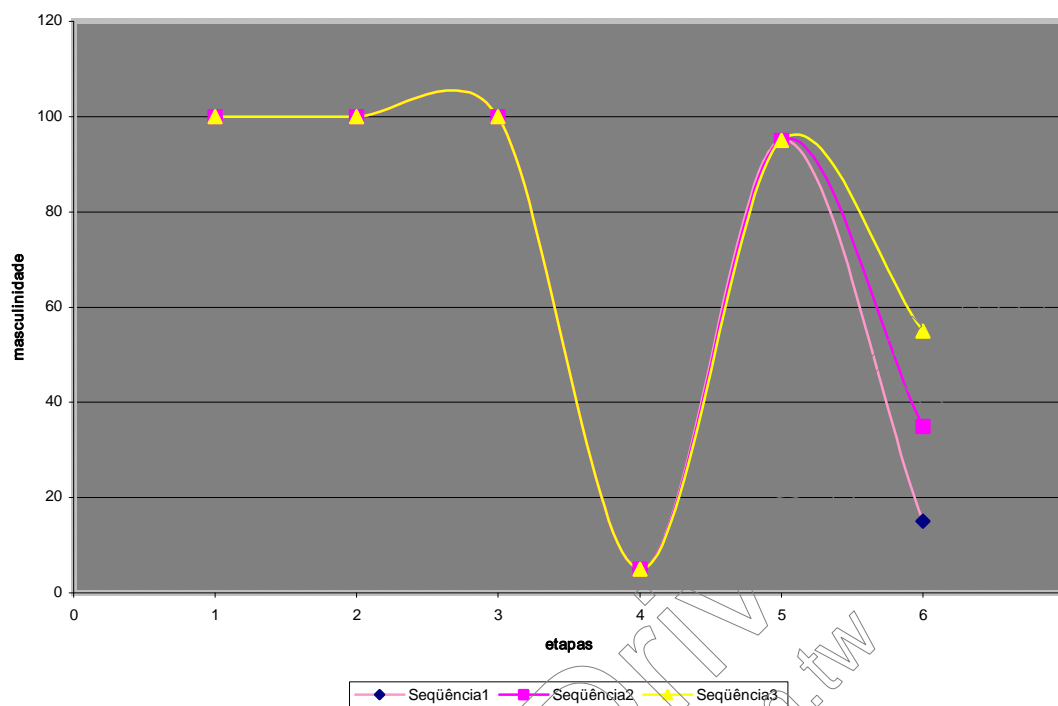
Transsex

The split classification of transsex on ICD-10, as f.64.0 and f.64.2 (for transsex children) is a fake classification. All transsex are primary in its ORIGIN and may be primary or secondary only in its MANIFESTATION.

Due to the furor of families and society against transsexuals and all GID`s, alot of them hide their realitites to suffer not alot of early violence and humiliations. Later, one day, they may show their sufferings and inner realities for others. Then, they APPEAR as if they were secondary in origin, but surely they are not secondary in origin, almost all of them are primary in origin but may show themselves socially as a secondary manifestation.

Let`s see a typical TS core gender identity trajectory:

Trajetória Transexual MtF congênita típica



The 3 first steps are perfectly normal, as a male source for MtF transsex and female source for FtM transsex.

The fourth step we may not know directly, today, through fMRI but as we said, Kawamura is trying to develop methods, and surely in some 10 years or a little bit more we will have more developments on this area.

The Gendercare MFX and FMX are good evaluators for the 4th step, but not direct evaluation. But we may surely say, the step 4 for transsexuals, MtF or FtM show a real discord of gender, compared with the 3 first steps, mainly the 3rd. A radical polarization at the discord pole point, related to step 3.

The 5th step has almost the same controls as the 3rd, and the best evaluation today is the 3rd step.

Obviously the core gender identity created among so much discord, may start a not so well defined and not so well stabilized system attractor. Surely not a simple sink, but some oscilation may happen, **but not so big as some intersex ones. And surely, with a highly polar system attractor.**

The inner energy and inner self gender perception for transsex is very strong (much stronger than for some intersex, due mainly from the hard discord of gender polarity among genitals and basal brain; for hermaphrodites and some intersex, the differences between step 3 and 4 may happen, but they are weak differences, that generates weak gender difference gradients and so weak inner energies; for TS the radical discord between 3rd and 4th steps, even with some oscilations in 4th step, are much more radical, so much more stronger), and surely they are not, as some intersex and mainly hermaphrodites, so suggestible and so manipulable.

Most of times, torture & oppression may destroy the person (self mutilation, self extinction) but generates not an easy adaption for external influences (as show hermaphrodites and some intersex, surely not all).

Some biological core gender identity unstability may happen, and alot of sufferings may be delivered by social exclusion and humiliations.

The lack of professional opportunities is normal, and the lack of recognition of the real gender identity and gender expression generates alot of sufferings too.

The mix up of transsex with sexual orientation typical situations (that are not medical problems but only human diversity), is also a source of social problems for transsex and other GID people.

Obviously they need medical help, to correct the body to adapt it perfectly to the brain that generates the mind. Body (genitals, chromossomes) and body (brain, self virtual generation) need to be in harmony, to have possible happyness and live in peace.

As soon the genital and secondary (hormone therapy, surgeries) corrections, after the best diagnosis possible, the better.

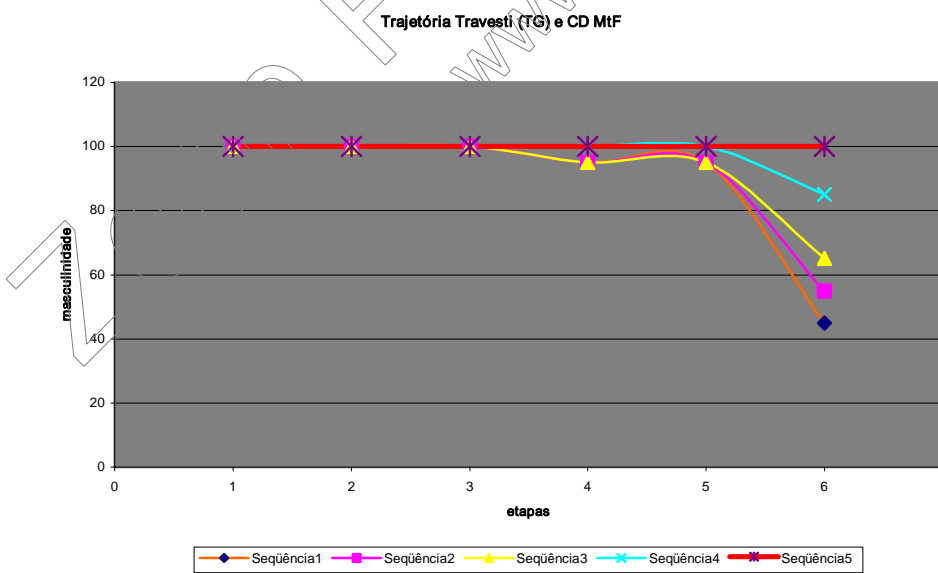
Transgenderism-TG and Crossdressing-CD

As we will see, those realities are very far away from transsex, in its causes and characteristics.

Core gender identity formation for transsexuals, MtF or FtM, show a radical discord of gender between the first 3 steps and the 5th step with the 4th step. That radical discord of gender will generate a discord gender identity, and a not so simple one, with some unstability and oscilations, as we showed above, with a radical crossed gender polarity.

The same do not happen for TG and CD.

See some typical TG and CD trajectories:



TG and CD show no biologic discord of gender on the 5 biologic steps.

As we saw in David Reimer`s history, we saw hard early traumas (as terror, torture or sex of rearing) may not change polarization but may turn what was natural and biologically stable in something much more unstable.

We know too, hard traumas, may start DID- dissociation identity disorders and PTSD-post traumatic stress disorders).

Our almost 10 years gender therapy practice show us, due mainly to early hard traumas (that may generate PTSD, DID) alot of TG-GIDNOS may start; and also, due to not so early nor not so hard ones (that may start PTSD) may start CD-GID situations. Core gender identity may start oscilating as a period attractor, even not radically changing polarity, due to those traumas, as PTSD and DID may start sometimes. Not always, surely, but most of times, surely.

We would not say it is a mandatory condition all TG and CD are trauma derived. What we are saying is most times TG and CD are trauma derived.

Trauma generated TG`s normally are due to very early and very hard traumatic experiences, **mainly mother rejection or related traumas** (that could also start hard PTSD or DID situations).

It is important to understand that to disturb something so well established as core gender identity, in a stable polar system as a normal man or woman, we need alot of energy. Hard early traumas are situations that develop alot of psychical energy, sufficient to destroy or to deform core gender attractor, even a simple male or female sink as a period with some oscilatory movement.

Some psychiatrists today are mixing up (again) TS with TG when they say DID due to hard traumas may be related to TS. No, not really. But surely it may be related to TG as GIDNOS.

CD also is mainly derived from traumas, but not so early nor not so hard. For example abuse and violence, sexual or not. Abuse always start low self esteem feelings, and those feelings, after abuse, may start cross identification pulsions.

The psychical energy of those pulsions may be sufficient to start a light oscilation of core gender identity, as CD.

Those are practical rules, derived from therapeutic experience, after some thousands of tests and hundreds of evaluations, studying patients from the 5 continents for almost 10 years.

So, TG and CD are victims of society, of their own families, of the local ignorance and local limitations. As David Reimer, they had original natural well defined, well polarized, simple core gender identity attractors as a sink. David was mutilated by a surgeon, and later tortured by his family and John Money. TG and CD are not mutilated, but are tortured by life mainly through the action or lack of action of mothers, and sometimes fathers & others.

Trauma & torture, with enough intensity and energy, may really destroy or deform the simple attractor, the simple well stabilized one.

Gendercare MFX and FMX tests core gender identity trajectories evaluation

Up until now we were talking mainly about the 5 biologic steps for core gender identity formation.

Two of those steps we know really: step 2-gonads and step 3-sex or genitals.
Step 1 and step 5 we may evaluate considering mainly step 3. No big problems.

Step 4 is really the critic step, because we have no direct evaluation, so we need to develop the best evaluation possible, using not direct measurements.

Gendercare MFX and FMX tests consider some ages and age determined characteristics. That way we may have a good evaluation for children core gender identity, that we consider the best evaluator for step 4, because the small child will show more freely its brain (surely we hope one day our game tests for children will help that evaluation too, with multiplayer online tests based on Ways & Dreams Gendercare game-tests).

Considering the other age characteristics, we may define a **complete core gender identity formation trajectory** for the patient.

Also we may define the **phase diagram for the core gender identity formation** for the patient, and also determine **the core gender identity attractor polarization & conformation**.

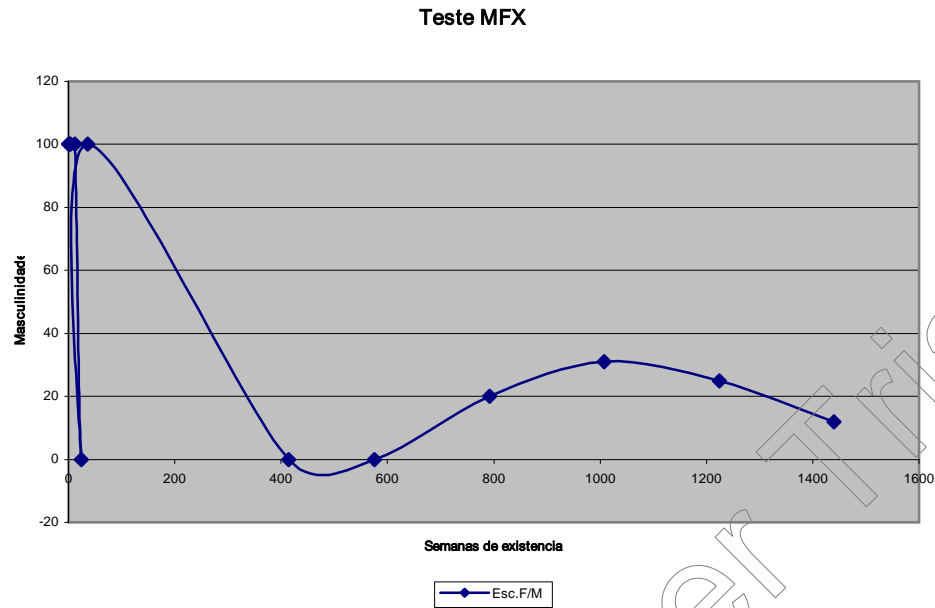
We show below, an example, all examples here are real results, for a MtF transsex core gender identity trajectory.

The other trajectory plots, we showed only the biological steps, the hard core formation 5 steps. Here the trajectories for the tests are complete trajectories, for all life until the present day age of the patient.

At the x axis we may see time as weeks after conception (or uterus insertion). The 4 first steps happen during gestation, so in the beginning of life, and the step 5 greatest influence is at first childhood, so also in the beginning, but not so early enrooted beginning.

In the y axis, we show a masculinity scale, as the other trajectory plots.

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MFX and FMX phase diagram & core gender identity attractor configuration evaluation

Topology is a kind of mathematics that generates typical forms, and through those typical forms we may understand the dynamics of complex systems.

Below we will show some phase space diagrams and core gender identity attractor configurations for TS and CD real patients.

At the x axis we have the velocity gradient, that means the gender identity forming velocity.

At the y axis we have a 0-100 masculinity scale. The examples are for MtF TS and CD, so we measure unexpected femininity through MFX test. The 100 level means 100% unexpected femininity and 0 means 0% femininity (100% masculinity).

That scale is the inverse scale of the core gender identity trajectories, where 100 means, for MtF analysis, 100% masculinity and the 0, 0 masculinity (100% femininity).

Diagrama de Fase TS típico/Toda Vida

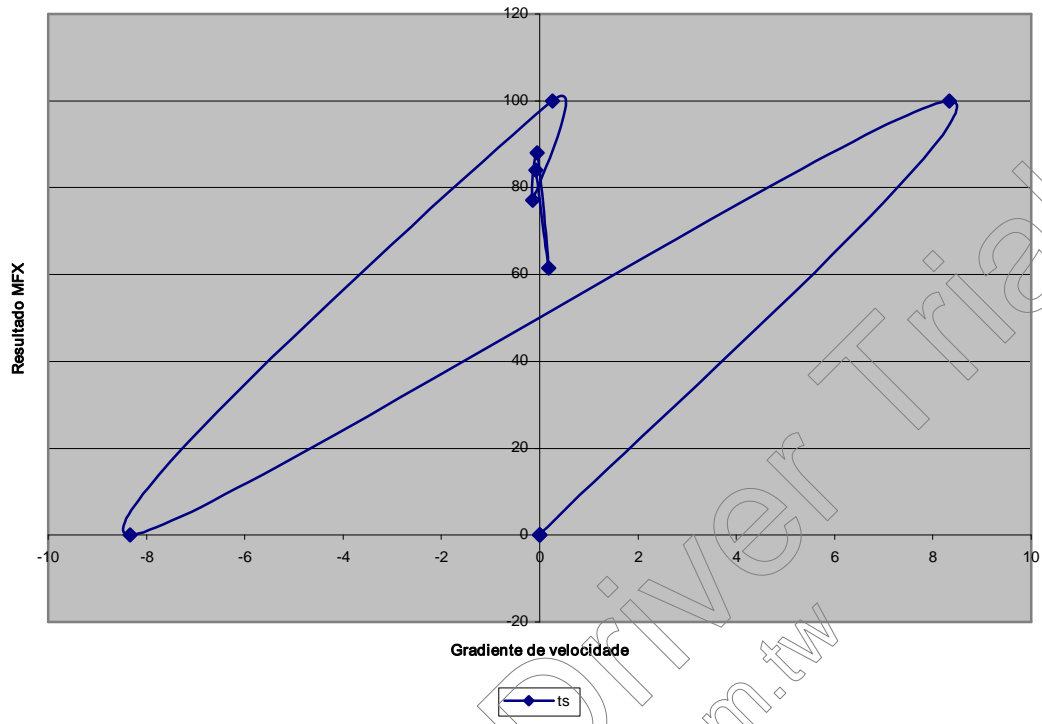
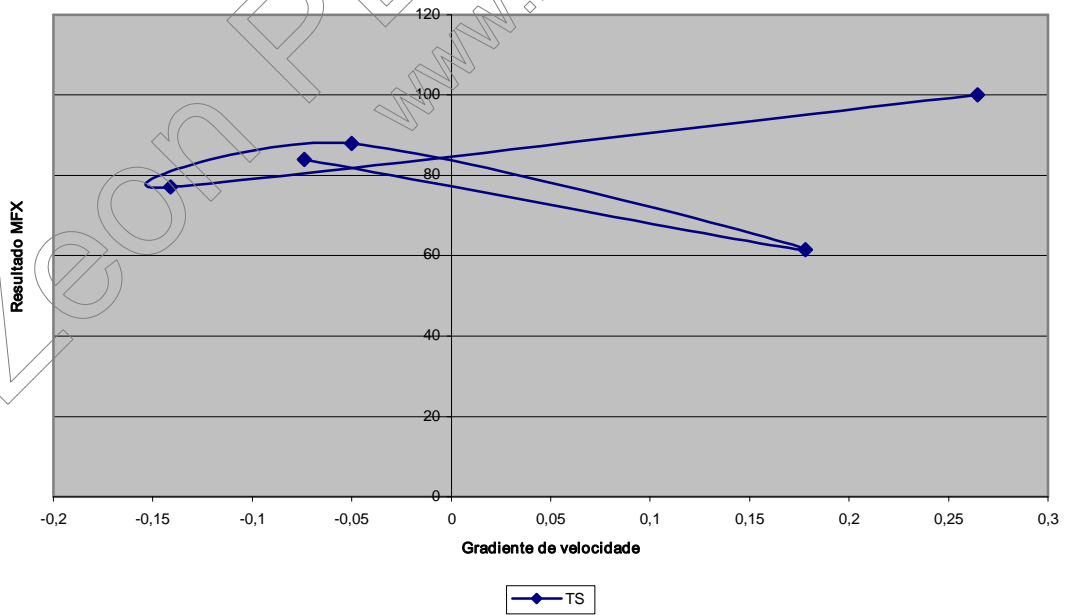
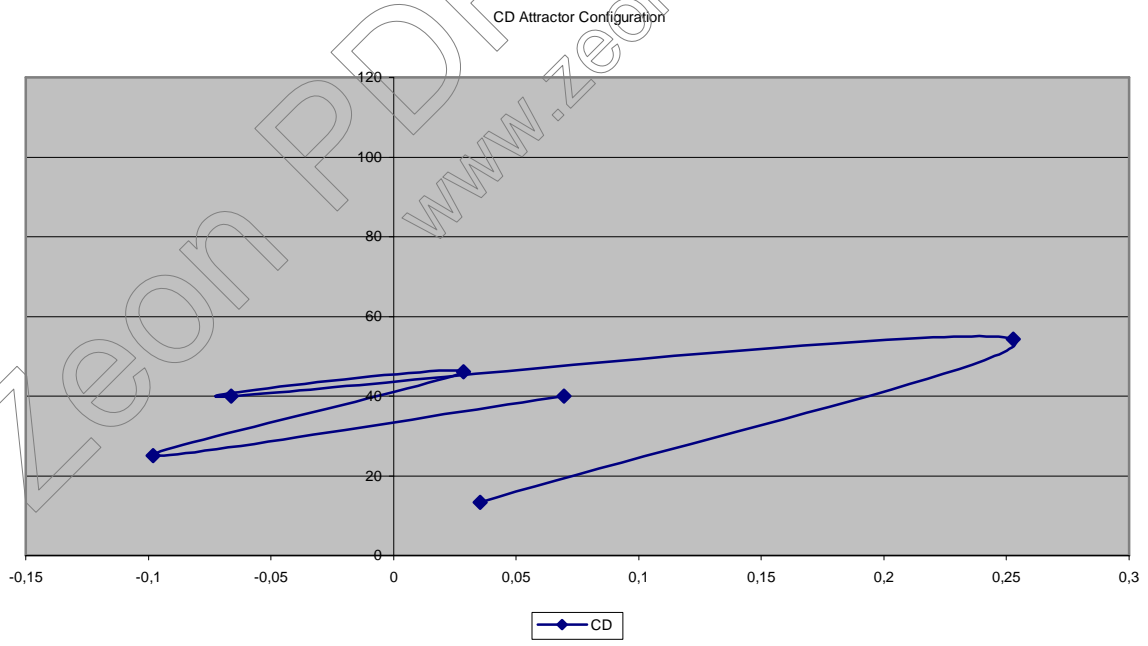
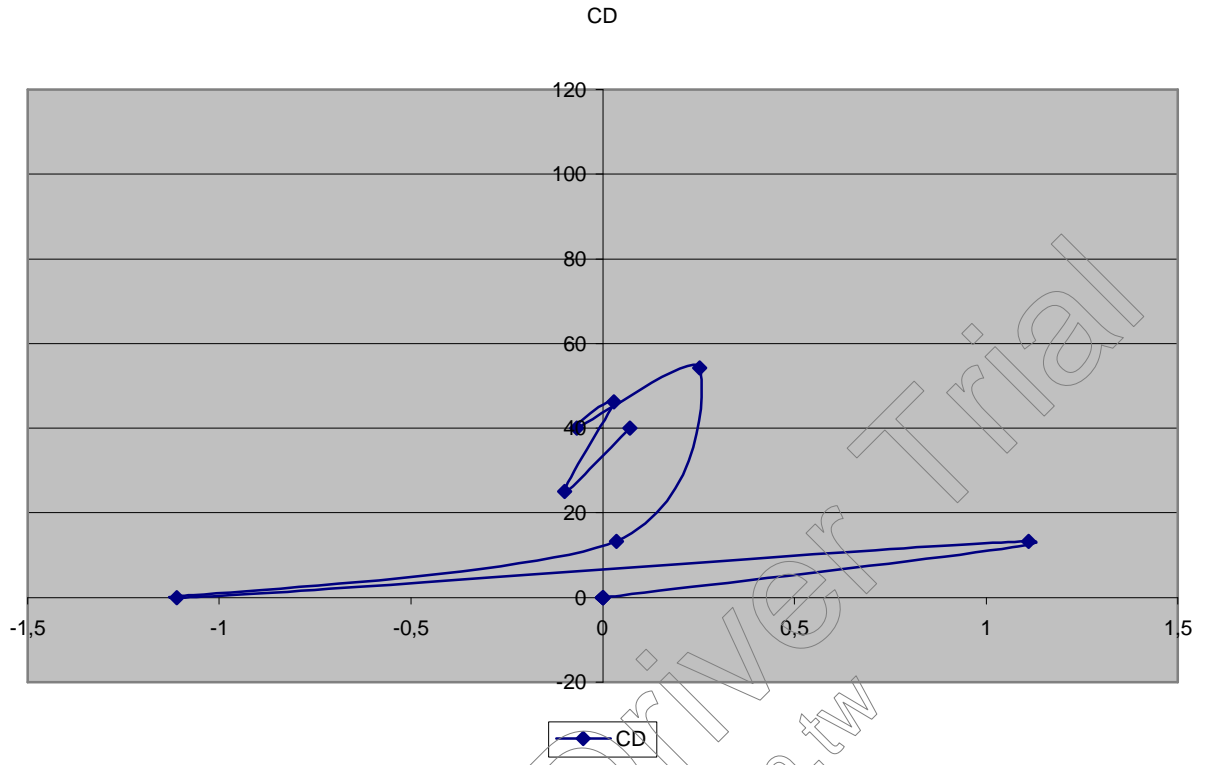
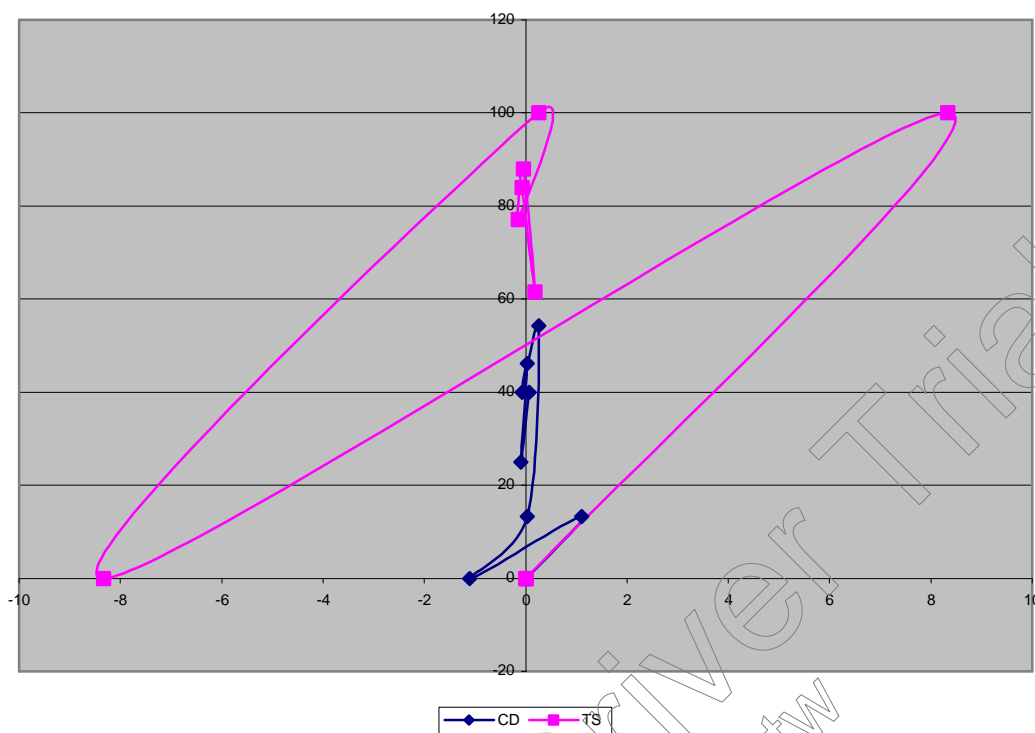


Diagrama de Fase TS pós natal Attractor Configuration







We show here 5 figures, obtained through our MFX tests.

The first figure show for a typical (real) TS MtF situation, the phase diagram for core gender identity formation.

The second, for the same patient, the shape of the core gender identity attractor.

We see it shows some oscillatory movement, between some 65% femininity to 100% femininity (so very polar as a female attractor), with a middle point and final point around 80-85% femininity. The source of that system was a 0% male chromosome and sex situation (source and attractor in a radical discord of polarization).

That patient was evaluated as a MtF transsexual, and will have in some time the MtF SRS after some time of MtF transition and HRT-hormone therapy.

The third figure show for a CD patient the same evaluations, for phase diagram and the fourth figure the attractor configuration and shape, for core gender identity.

We may see the oscillation is not so hard as the TS example, and the unexpected femininity is much more limited, between 20 and 50%, main value at 35-40% (a male pole attractor).

The fifth picture puts both phase diagrams, for the TS and the CD patients, in the same scele. The TS obviously is less stable than the CD, and we may compare them, and compare typic situations for GID diagnosis and suggestions on how we may help the patient.

It is important to remember, we developed a special software for MFX and FMX tests evaluation. Through that software we may input the 100 test results, and the program calculates and plots trajectories, scales, phase diagrams and attractors for the patient.

That software will not be sold, but only our students that complete our GIGS-Gendercare GID School Dr.Torres courses will learn and freely receive the passwords to download the software, to apply and work with MFX and FMX Gendercare tests, as Gendercare possible partners, presentially locally for their local people or at its own gender clinic on the Web.

Important note:

Dr.Torres is a little bit old and feel a little bit tired. She would like to prepare, for local action and action through the web, in partnership with Gendercare OR NOT, gender experts. That is the main reason why she started GIGS- GID School.

Gender reality asks for a new paradigm

Genitals or sex define not gender, not on rats, nor on non human primates, mainly in human primates.

To torture children imposing artificially a sex of rearing polarity with oppression, is not the solution, but may generate big traumas and even suicides.

Freedom we have with knowledge.

To know gender identity is not a simple fact, that we may manipulate, but it is a whole process that is biological in its origin, that has its main steps during gestation, that show signs that we may recognize, that write a history or a trajectory that through tests we may evaluate, that through topology, using phase space diagrams and attractor conformation and shape we may study and develop diagnosis and methods to evaluate adolescents and children, mature people and all kind of gender variances, from hermaphroditism, through intersex to transsex, and also all GID and GIDNOS, as CD`s and TG`s is a very important step for that knowledge

That new perspective that brings new knowledge is a new world that opens a new door.

Let`s have enough courage to go and surpass that door.

With a patient centered point of view,
with those new methods and points of view,
considering complex dyanmic systems using topology and complex thinking,
we may really help children, all around the world.

We may understand gender variance in all its plurality, and mainly considering a point of view that will help all patients and victims to stabilize their systems, correct their bodies, to live with respect and integrity in a more civilized world.

In others words, we need to start a changing of paradigms.

The older ones, worked for us when it was necessary. They were limited, as ours are also limited. But today ovr paradigm works better than the older ones.

It`s time to change.

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Letters

We publish here a letter we received from M.Italiano from GIGS-GID School.

We hope, in the first edition of GID Journal of 2006, we will publish his complete paper about the letter subject.

Transsexual etiology, Xq28, Xp22, SOX3, and DAX1: A preliminary report on an attempt to replicate Dr. William J. Turner's gender gene hypothesis.

by M. Italiano
GIGS- GID School

Dear Dr. Torres,

I have preliminary findings in my study to attempt to replicate Dr. Turner's gender variants results.

My initial findings, based upon an internet study, and achieving a small sample thus far, polling individuals from 3 sex reassignment related web groups, have not found the pattern which Dr. Turner had noted.

As you know, Dr. Turner found a link at Xq28 first for male homosexuality, then for transvestism, transsexuality, asexuality, and even female to male gender variants.

My result suggests a new locus for transsexualism at Xp22, and more than one loci for transsexualism in general. There are likely at least two loci for transsexualism, each of which lies near the two and separate pseudoautosomal boundaries of the X chromosome. One is at the very end of the long arm (q arm) of the X chromosome, and one is at the very short arm (p arm) of chromosome X.

In my correspondence with J. Larry Jameson, M.D., Ph.D. of Northwestern University, he suggested the gene in question which fits Dr. Turner's criteria, may be a gene called SOX3, which is located in the Xq27 region, and which has a trinucleotide repeat sequence. Unfortunately, his lab has rescinded his offer to test our sample for an alteration at SOX3. However, as SOX3 is very influential in hypothalamic and pituitary function, as well as being involved in cases of pathogenesis of the reproductive system, SOX3 remains an important area of investigation for gender variants. Labs in general may find it beneficial to investigate SOX3 in gender variants for these reasons.

In my preliminary sample, I find there may be a locus for another gene, which is involved in pathogenetic reproductive development, including sex reversal of XY zygotes to females, as well as hypogonadism in phenotypic males. Dr. Harry Benjamin reported in his 1966 book, *The Transsexual Phenomenon*, that 40% of his transsexual m to f patients were hypogonadal. This new gene, which would fit the data of my thus far limited sample, is the DAX1 gene. It does not have a trinucleotide repeat sequence, and therefore, is not expected to follow Dr. Turner's finding of a Sherman's Paradox inheritance pattern in these individuals. Indeed, from my preliminary sample of six m to f transsexuals and blood aunts versus blood uncles on the female side, there is no skewing in favor of an excess of blood aunts, as there was in Dr. Turner's sample. In fact, there was a total of 3 blood aunts and 7 blood uncles on the female side, which is, actually the opposite of what would be expected according to Dr. Turner's hypothesis.

Dr. Turner linked homosexuality, transvestism, male to female transsexualism, and asexuality to the Xq28 region, finding a skewed blood A/U ratio on the female side, highly favoring blood aunts, which were around the same frequency in all groups. This makes it likely, that one form of each gender variation is linked to Xq28. It also follows the pattern of 7 or more X linked disorders at Xq27-28, including fetal wastage of sibs of blood maternal aunts on the female side of such probands.

In Dr. Turner's studies, all sexual preferences, including asexuality, are present in this linkage, as well as in extended blood sibships, including MZ twins, suggesting that there is a common unifying thread for each gender variation at Xq28, and that they may represent a common "genetic gender condition", with differing behavioral phenotypes.

My preliminary finding, shows that there are yet another group of transsexuals, whose transsexuality is not likely to be associated with Xq28, but rather another locus. For instance, one individual has evidence of extended linkage of 3 markers, all of which are known to reside around Xp22, which is on the opposite end of the X chromosome than is Xq28. Furthermore, the literature suggests a linkage of Kallman's syndrome to transsexuality, which is far greater than that would be expected by chance. Kallman Syndrome is also located in Xp22. Moreover, a gene controlling the H-Y Antigen (once hypothesized to be related to the etiology of transsexualism) resides at Xp22. Finally, a higher number of Klinefelter's Syndrome individuals are also gender dysphoric, and a region of Xp22, escapes X chromosome inactivation in such persons, giving such persons a double dose of Xp22 genes, including ones which should predispose for hypogonadism as well as for an increased risk of transsexualism. All six transsexuals in my study, report either an asexual or bisexual or even uncertain partner preference, which would also be expected if the DAX1 gene were involved. An uncertain sexual preference has never been described by any researcher for transsexuals, although it is not an uncommon presentation in some intersexed conditions.

Although this limited sample does not have any individuals who report attraction exclusively to men or to women, an asexual partner preference has also been found at Xq28 by Dr. Turner. Thus, it is likely, that transsexualism is multi-factorial in linkage, and that each separate locus contributes factors for a picture of transsexualism, each of which is unique, and each of which cannot be a symptom or manifestation of sexual partner preference per se, as has been recently suggested by some researchers (eg., J. Michael Bailey, Ray Blanchard).

Likewise, reported age of onset in my group is from 2-3, to beginning at 40. Thus, I haven't found early onset transsexuals to be what would be termed by some as "homosexual transsexuals".

The Xq28 region has many genes, several of which have also been implicated in some disorders, such as autism, bipolar disorder. There may indeed be a gene which influences behavioral phenotypes in regards to gender.

However, preliminary evidence suggests, that there may also be a gene, in Xp22, which is related to transsexualism, and represents a form of transsexualism which follows intersexed phenotypes and endocrinopathies such as Klinefelter's Syndrome, Kallman's Syndrome, Idiopathic Hypergonadotropic Hypogonadism, both in somatic and clinical behavioral features.

Further investigation in this regard is warranted.

M. Italiano

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