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ON CULTURE, BIASES, BRAIN WASHING, BEHAVIOR CHANGING, PUBLIC OPINION AND SIMILAR

KÜLTÜR, ÖNYARGI, BEYİN YIKAMA, DAVRANIŞ DEĞİŞTİRME, KAMUOYU VE BENZERLERİ HAKKINDA

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Abstract

This is an approach proposal to the assessment and extinction predictability, through a “Brain electro-Activity Map” to Culture, Biases, Brain Washing, Behavior Changing, Public Opinion and similar. In this paper, we tried to propose an approach through a “Brain Electro Activity Map” to predict the assessment and modification possibility of Culture, Biases, Brain Washing, Behavior Changing, Public Opinion and similar. Because according our opinion, technically there is not any Neuro-Physiological difference between their acquisition and extinction. We introduced some new concepts which are “flexophrenia-sclerophrenia” and “facilitated and automated connectomes” which are always in need of expression-activity with strongly invasive components. Then by the combination of the above three concepts, with the well-known old “need of stimulation” (which is an implicit form of accepting the presence of a “need of activity-expression”), we asserted that all the above mentioned behavioral patterns’ onsets, durations, resistances, changes, can be approached, predicted and changed, in a similar way to each other’s and, can be traced as well, through the implementation of the “Brain Electro Activity Map”.

Keywords: Culture, Biases, Brain Washing, Behavior Changing, Public Opinion, Therapy

Özet

Bu makale, oluşturulabilecek bir “Beyin Elektro Aktivitesi Haritası” vasıtasıyla, Kültür, Peşin Hüküm, Beyin Yıkama, Davranış Değiştirme, Kamuoyu ve benzeri konuların oluşturulması, sönmesi ve öngörülebilmesi konularına bir yaklaşım hakkındadır.

Yazıda, oluşturulacak bir “Beyin Elektro Aktivitesi Haritası” vasıtasıyla yaklaşımı önermemizin sebebi, kanaatimize göre, bunlar arasında Nöro Fizyolojik mekanizma açısından teknik olarak, onların edinimleri ve sönmeleri konusunda, herhangi bir farkın olmadığı kanaatinde olmamızdır.

Bu arada, “fleksofreni-sklerofreni” ile, güçlü bir şekilde istilacı komponentlere sahip olan ve her daim kendini ifade etme ihtiyacında olan “kolaylaştırılmış otomatik konnektomlar” gibi yeni kavramları da ortaya attık.

Böylelikle, yukardaki kavramların ve, çok iyi bilinen “uyarılma ihtiyacı” (ki aslında aktivite ve ifade ihtiyacının zımni ifadesinden başka bir şey değildirler.) olgusunun kombinasyonları ile, yukarda adı geçen kavramların hepsinin de, oluşumları, sönmeleri, tamamen yok olmaları, ve tüm bunların öngörülebilmelelerinin, mümkün olabileceğini ileri sürmeyi önerdik.

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1. Introduction

This is an approach proposal to the assessment and extinction predictability, through a "Brain electro-Activity Map" to Culture, Biases, Brain Washing, Behavior Changing, Public Opinion and similar.

A healthy organism, at the beginning of his life, hypothetically possesses the ability, of interacting with his environment and, of learning from his experiences, in a multipotent way (Draganski, B. et al., 2004). If the inner or outer conditions change, the brain also can, easily shift his interaction, in accordance with the circumstantial requirements: we propose to name this mentally flexible Neuro-Physiological state as a "flexophrenic mental state"; in such a state, the mind is extremely malleable and pliable. In this respect a healthy teen-ager, is undoubtedly in a "flexophrenic mental period".

On the other hand, over the time, either for biological ageing or occupational restrictions which are molded by the routinized monotone daily life, the individual's interaction with his environment, becomes less variable. Thus the brain, to cope with the basic daily needs, reduces his activities to its minimally necessary connectomes only. In time this attitude, gets increasingly rigidified, solidified. We propose to call this Neuro-Physiological state, as a rigidified or "sclerophrenic mental state". In this sense, a retired senior with no hobbies or similar, even if not demented, is a typical example for a sclerophrenic subject. In this phase the individual is in difficulty of perceiving and reacting as like the young do.

We propose that the difference between these two different mental states, can be detected through some futuristic neuroimaging devices (like some variation of an qEEG or simply by some new softwares added to the evaluative power of the presently implemented similar technologies, just to amplify its sensibility): "We hypostasize that, while we present different problem solving situations to the subjects, at least at their initial state of evaluating and analyzing the stimuli, in the flexophrenics, more connectomes will be triggered in respect to sclerophrenics". Then if necessary, although remained within the frames of the predetermined "facilitated and automated connectomes" (FACs)", will express themselves through richer behavioral diversity too.

In other terms the flexophrenics, while exposed to triggering stimuli, will react through more areas of their brain, in comparison to the sclerophrenics. Because the sclerophrenics, either by their natural preferences or their life requirements, will tend to manifest themselves repetitively "just through the same few cerebral structures", regardless of the variety of the problems exposed to them. In other words, they will react, like a mentally limited individual, who cannot perceive the stimuli's crucial details properly and, responds to any of them in a stereotypic way.

Lastly, we would introduce a third concept; the "facilitated and automated connectomes" (FACs). By this term we intend, the entire neuroplastic assembly of our behaviors (functional connectomes), oriented either willingly-unwillingly, consciously-unconsciously toward a

given target or, for the need of their expression. In this sense, just to give an example, perhaps our biggest FAC is our personality.

We propose to consider that "all the behavioral patterns that get reinforcement and inevitably become repetitive, in the same time, are inescapably FACs". Once initiated in some way, they unchain themselves and when necessary, step by step proceed to the next phases of the behavioral set. In this sense, all the performances related to traditions, cultures, habits, attitudes, beliefs, personalities, opinions, biases and similar are FACs.

2. Discussion

2.1.1. On the Features of FACs

Life equals activity. Even the inactive state of an organism, is achieved by its active intervention. We cannot imagine any functional gap in our vegetative system. Whatever seems to be inactivity. in our lower brain is nothing more than an actively suppressed process. There is no evidence that the same rule is not valid for our cortical activities too.

2.1.1.1. Need of activity-manifestation-expression of FACs

As a consequence, we must accept that any learned material, after being converted into a FAC, by its nature, needs to express-manifest his existence. In other words, any FAC is always in "need of self-expression/manifestation", as much as the other vital, vegetative functions are.

(Because of the FACs' close relation with the "learning processes, memory and similar topics", we suggest further readings of the colossal work of H. Ebbinghaus (Ebbinghaus, H., (913) and other contemporary resources (Crowder, R. G., 2014) for they remain beyond this manuscript's limits and purposes.)

2.1.1.2. Invasivity

FACs are invasive. Even if some of their constituent parts go missed, they tend to be self-defensive and insistently surviving. They tend to invade and fill the missing parts' functions. Thanks to this ability, the individual doesn't get negatively affected by the lacking faculties.

A person, if trusts to his friend, he/she normally doesn't change his mind even if sometimes the friend does really cheats him. Or vice versa, you continue to distrust a person, even if sometime he says also the truth. A highly reputable company is always perceived as reputable. In the same way a company with a bad reputation, finally, even if at the end day creates a really excellent product to a very convenient price; you still continue to refuse the offer. These all are examples for the invasivity of a FAC.

2.1.1.3. Persistence and resistance to changes of FACs.

Under normal conditions FACs have a strong resistance

to altering interventions; Because, a material, the more is learned the more is old, the more is generalized, the more is connected to several aspects of our life, the more are the hooks where our memories can be hanged, the more difficult is its cancellation (Ebbinghaus, H., (1913) (Crowder, R. G., 2014) (Antikacioglu, L. (2015)). These characteristics of a learned material, give a persistency and resistance against destroying interventions.

Our memories are mostly stored in an interrelated and interweaved form across the entire cerebrum. This is the reason of why memories don't reside in specific locations only, but instead are distributed everywhere, according the characteristics they have. It looks that these sophisticated neuronal interconnections, by nature, have the tendency of undertaking the functions of the damaged parts, and of continuing to execute their predetermined knowledge in accordance with the big picture. These all, are knowledge on scholar textbooks. As much as the information is still capable enough to fill the missing gaps, the brain fills them all, and continues to be efficient as before.

The above mentioned mechanism explains why our personalities have continuity. Explains why minor attacks to believes, opinions, biases, habits don't easily change and insist to survive.

The same fact explains also why old habits, phobias, compulsions, obsessions, childhood sentiments toward our sweet-hearts, the practiced old professions, love for family members with which we have always been in close relation, are not easily changed or forgotten.

2.1.1.4. Subsequent Interruptions and/or discontinuities

In course of time if in our daily life any discontinuity happens, flexophrenics, easily shift their FACs and adapt themselves to alternative FACs, or if necessary they can form completely new FACs because they still have the organic capability to do it. It depends on where they stay on the scale of flexophrenia-sclerophrenia and other parameters.

The sclerophrenics instead, cannot even be aware of the changes or, even if they do, it is very likely that, they cannot replace them with new FACs.

However, the general rule is that by the strength of discontinuity or suppressing powers, FACs can extinguish through the same rules of the psychology of forgetting.

2.2.1. The well-known "need of adequate stimulation" to prevent "stimulus deprivation" is in close relation with our FACs.

It is well known that "stimulus deprivation" has extremely harmful effects. Experiments made on stimulus deprivation (Orne, M. T., 1962), sensory deprivation (Solomon, P. at al., 1961) are quite old and interesting. In experimental situations, researchers have documented hallucinations, paranoid thoughts, psychotic reactions, psychological instability etc.

So we first have our natural biological vegetative infrastructures which are, in need of stimulation-

manifestation thus, in need of adequately "being active".

Subsequently we have the learned, added, gained structures, namely our FACs. These attitudinal, behavioral components are tied in a personally unique way, to our other cortical and subcortical activities as well.

An example to gained FAC is the subjects' entire life style. If you withhold a person from getting his normal stimuli, and manifesting his everyday life style, he falls in serious trouble:

In fact, it is beyond doubt the presence of physical and psychological deteriorative effects of long periods of imprisonments.

Many people cheat his/her spouse but only a few of them divorce them. So there is nothing contradicting our FACs' need of manifestation. This attraction of adventure, up to a certain point can be strong. But then the FACs take again the stage, the adventurer turns back to home. After all, cannot miss the years spent with his/her lovely spouse's companionship, even if can dare to think that the new one, is better than his/her partner. If their relation hadn't been converted into a FAC, everybody every time, at a minimal possibility would abandon his regular relation and would run to the arms of the better one. But almost nobody does it; because for them since long ago their relation had already been converted into a FAC. Their adventure is temporary. (In neurophysiological technical terms is as a result of inhibition because of over stimulation.)

The immigrants going to new lands normally tend to go near the same minority groups. Of course, there are many reasons behind their decision: security, cooperation, collaboration, communication facilities etc., but another reason which is always ignored, is the need of expression of their FACs. (In fact, members of any other minority group also, are satisfying their similar basic needs, although all of them in their own minority groups and in a different way and style.) So the problem doesn't stand in only the need of satisfaction of a given need, instead, stands on how and where to satisfy it and to manifest his own customary FAC.

In sportive games, every other motive aside, the important one, is the need of expression of one's own FAC which is nested in the emotional and mental expressions, related to the game situation of their team's game and, related to their close sustainers etc. In this way they satisfy their FAC's "need of adequate stimulation" to prevent their "stimulus deprivation" and manifest themselves properly.

If you are once a sustainer of a certain political tendency, very likely you will lifelong be, the sustainer of the same tendency, unless there is some very striking change. The uncertain and labile citizens, who can change their opinions, are usually a small part of the population. Your FAC is made of the political environment of that specific party, and being with them will consent you the possibility of repetitively sharing your opinions among alike minded citizens. In this way you satisfy your FAC's "need of adequate stimulation" to prevent their "stimulus deprivation" and manifest themselves properly

Most of the times, when you buy your daily newspaper,

you do not buy it to see what are on the news, because very probably you, through some other means, have already heard what has happened, or at least, you can be informed from a variety of other means too. Nevertheless, you buy your favorite one, just to check, share and confront your opinions with alike minded ones, of the "same political tendency". You desire to read the same interpretations, which in reality you already know. The fact is that, every other people who is a sustainer of your same opinion, all together form, your and their, FAC constellation. In this way you satisfy your FAC's "need of adequate stimulation" to prevent their "stimulus deprivation" and manifest themselves properly.

You eventually do not even look to the opposite media, just because they are not part of you FAC.

All the above mentioned behavioral patterns' assessment and change predictability, can be obtained from a normative database of our working brain; its electrical activity.

2.3. What is the exact relation between FACs and Culture, Public Opinion, Biases, Brain Washing, Behavior Changing, and similar?

We already mentioned that any newly assessed relation-interaction, by our Central Nervous System, tends to convert itself, into a FAC which in turn ends up to be "in need of expression-manifestation".

On the other hand, our nervous system doesn't work according "labels-names", given by humans. "Culture", "biases", "brain washing", "behavior changing", "therapy", "public opinion" etc., are all names, labels and concepts created, categorized by humans. The nervous system instead functions, just within the Neuro-Physiological principles. In fact, any stimulus, either simple (for instance tactile) or complex (for instance, any bias or cultural motive) if surpasses the excitability threshold, the neurons perceive it and learn, otherwise they do not. Then as a natural consequence, like any other FAC, they need to be stimulated-manifested, no matter how we name them.

This is the simple reason beyond our assertion that FACs rules are equal for any of the above concepts and for many others too.

2.3.1. FAC and Culture

The people prefer to stay within their own cultural milieu; because they satisfy their need of expression.

In vacations, after a short happy period, we begin to look for our familiar tastes. We all know that anybody in need of distracting himself from his boring routine daily life, goes to a leisure travel. He/she first, is oriented to novelties, exotic tastes, foods, smells, views, customs, and practices and is highly probable that is also happy of that. But then, after being relate of novelties, which varies according the personal differences, begins to miss his familiar milieu. The more phlexophrenics, tend to resist longer, to the new circumstances, in regard the sclerophrenics. (We propose that it would be interesting to test our

hypothesis, and, predict the difference of resistance to novelties, by measuring the subjects' activities to new situations, through our imaginary futuristic device. Here probably stands the explanation of why, even if we spend the nights in five stars' excellent hotels, we begin to miss our "home, home sweet home". It is simply the need of expression of our familiar behavioral patterns, with which we get used to live, since our childhood.

This is why "culture" is a perfect FAC, a perpetually self-conserving set of patterns, always in need of expression-manifestation.

2.3.2. FAC and Biases

Biases, undoubtedly are, strongly learned and reinforced and are in strong need of expression-manifestation.

They give us great satisfaction. Especially when we share those feelings and ideas with similarly oriented minds. Needless to say, by repetition, they become even stronger and stronger. They are another example of a perpetually self-conserving set of patterns in strong need of expression-manifestation. Thus they can perfectly be accepted as typical FACs.

2.3.3. FAC and Public Opinion

All the FACs are of extreme importance, especially if they are shared with others. In this sense they don't have any difference from the biases. Imagine large crowds sharing the same opinion; it would be extremely easy to manipulate and guide all of them toward preferred targets. In an important football game assisted by tens of thousands of people in a stadium, would be enough even the smallest spark – misleading word, phrase, opinion etc. -, to set off a dangerous confusion and, push the people toward criminal activities. In fact, in the past we have documented, even a football war in 1970, between Honduras and El Salvador, with almost more than 4000 people killed. The real responsible is the need of expression of their FACs. If it hadn't existed some background of predisposing aggressive FACs, in other words certain types of public opinions toward the rival counties, the game's problem in itself wouldn't be enough to initiate such a consequence. As far as we know there are no other wars documented as a consequence of an international sportive game.

The conversion into a FAC of a public opinion is a very important matter for the manipulation of the crowds. Is extremely useful for the politicians; as politicians do care too much, informing/misinforming the public, in order to convince them to behave in the way they desire, they first, prepare their supporters to their (to the politicians') desired target. For they normally prepare gradually their audience, to later convince them on some arguments, that at a first impact, probably wouldn't be so easily acceptable, if they hadn't had a preparatory phase. Once the members are prepared, brewed and convinced (FACs assessed), huge quantity of people can be manipulated with almost no effort. Thanks to the automated need of expression of the previously assessed, preparatory FACs.

2.3.4. FAC and Brain Washing

The term has always been mysterious and interesting and often connected to conspiracies. If we examine it by a close attention, it can perfectly look as a different fact from the stand point of psychology, social psychology or social psychiatry etc. But, if we consider the brain washing process, from the stand point of neurophysiology, it cannot be considered as a different process, then the other learning processes. By reinforcement, any behavioral pattern can be converted into a FAC and, be in need of manifestation-expression themselves.

According "The free Dictionary" the definition is":

"1. Intensive, forcible indoctrination, usually political or religious, aimed at destroying a person's basic convictions and attitudes and replacing them with an alternative set of fixed beliefs.

2. The application of a concentrated means of persuasion, such as an advertising campaign or repeated suggestion, in order to develop a specific belief or motivation." (American Heritage® Dictionary of the English Language, Fifth Edition. 2011)

In this sense, no matter what is the content of the material thought to the person (with full time engagement). The only difference is that the brain washing processes take place by bombarding the subject 24/7 through materials supporting, justifying and confirming each other. So the brain washed person does not have any other possibility of behaving in an alternative manner, just because doesn't even have a time gap, to occupy his mind with a different material. For us this is nothing more than a FAC which later, will be in need of expression-manifestation. The only thing that is different is the condition and intensity of the assessment process. But the principles are identical. Once adequately assessed they are in strong need of expression-manifestation.

2.3.5. FAC and Behavior Changing, Therapy and similar

Here we have another example of a differentiated form of usage between terminologies which in reality are describing the same phenomena. Behavior changes, therapies are terms used by clinicians. But behavioral changes or therapies are simply based on learning principles. And in Neuro-Physiological terms, all kind of neurological processes inescapably should process through the same Neuro-Physiological principles.

Any material once strongly learned has no change to escape: gets converted into a FAC and, is in need of expression; no matter whether you name it therapy, behavior change, modeling or skill acquisition. Once we intervene to achieve a therapy or behavior change, if it becomes successful, it turns to be in strong need of expression-manifestation, and the patient gets cured or the behavior modified.

2.4. What and how are the relations between "flexophrenia- sclerophrenia-FAC and the need of expression-expression-stimulation" and "culture-

biases-public opinion-brain washing-therapies and similar"?

Our assertion is that, if we understand on where the individual stands in a "Brain Electro Activity Map" and how much an individual is "Flexophrenic or Sclerophrenic" we should possibly able to "predict" to what extend a FAC, in which type of individuals can be assessed, removed, softened, changed, reversed etc.

Through the same interactivity, it is possible to explain many aspects of "culture-public opinion-brain washing-therapies and similar" because their underlying Neuro-Physiological mechanisms are all the same; One rule fits to all.

2.5. Are there proofs confirming our assertions?

Yes, there are many proof in nature itself. Some of them have already been mentioned above.

This is the reason of why minor, or in some cases even major injuries or traumatic cases, our cerebrum is not too much affected. Most of the times, minor cerebrovascular problems, do not create big problems for the patient in their major life styles; because the remainder parts of the cerebrum undertake the problematic tissues' duties. For the duties pertaining to specific small cerebral parts, if anatomo-physiologically possible, are reorganized within the bigger picture of their major life style. For our life style's various aspects, piece by piece are deployed to every cerebral parts.

Consider for instance the mildly demented cases; Even if they find difficulty in remembering recent materials, many of them can still perform their profession skillfully; for their old profession have been rooted as a FAC since many years. As a consequence, a few details changed in their entirety, do not affect the normal functionality of their routinized task.

We cannot easily beat the paranoid thoughts of an individual; for since long time, those thoughts have been repeated, mentally ruminated and, turned to be their FAC. Rational comments and suggestions that we direct to them, remain just as unimportant details in confront of the huge organizational mental structure that they have weaved.

Ardent sustainers of any kind of thoughts and beliefs, do not change their mind with occasionally influencing criticisms; for their thoughts and believes are embraced by the integrity of their entire mental constellation; these constellations are their FACs.

Older psychiatric cases do resist more than the new ones to therapeutic changes, just because the older ones have a deeper patternal structure and, their FACs are more resistant to changes.

2.6. Where stands the predictability of the FACs' assessment, extinction and modification?

To predict the assessment, extinction and modification of any of the above mentioned FACs, we simply have to build-up a database of healthy-unhealthy subjects based

on the cerebellar electrical activity and create a "Brain Electro Activity Map".

Some device similar to the EEG/qEEG technology, or a variant of them, but equipped by a superior sensibility, would probably be sufficient.

Based on the collected data and, the conditions under which they have been collected, we can predict a variety of eventual outcomes concerning the formation, alteration of extinction of the above mentioned conditions, which in reality do not differ from each other's'.

Then for instance, we can hypothesize that; a) Young flexophrenics will be more open to changes than older ones. b) The relatively younger sclerophrenics will be more open to changes than older ones. c) The old FACs will be more difficult to remove. d) The more inclusive ones will be more invasive, thus, difficult to remove. e) The old FACS will be stronger than the new ones. f) The old but unnecessary FACs, will be weaker in confront of newer but necessary ones. g) FACs, will result to be unrelated to their functionality; unnecessary FACs will result sometimes to be stronger than the necessary ones. h) Etc.

3. Conclusion

It will be very useful to build-up a "Brain Electro Activity Map (BEAM)", through a futuristic device or through the adaptation of the actual ones for our special needs (some form of a qEEG), to figure out the flexibility degree of the cerebrum.

Such a BEAM can then be implemented as a tool to figure out the individual's reactions to opinions, biases, reactions to cultural changes, their open mindedness or readiness to psychotherapeutic procedures, to brain washing, to behavior changing interventions, and similar.

According our proposal, these all are FACs and are gained with the same Neuro-Physiological principles, and their acquisition's underlying mechanisms do not differ from each other's. Additionally, through the same database, the abovementioned FACs' assessments and modifications, can perfectly be predicted, manipulated, and in the meanwhile changes in them, step by step tracked.

It can be applied either to individuals or groups.

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