A vastly revised and updated version of this preprint is available as a chapter in a book titled: Reorientation of activities and self-environment integration: A new theory of activities. The book is available from <https://www.amazon.com/dp/9357738096>.

Reorientation of Activities and Self-environment Integration (ROASEI): Further development and comparison with trait personality theories.

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1. Summary

Reorientation of activities and self-environment integration (ROASEI) is a novel theory of activities. This theory has been developed further, mainly by comparing it with the theories of personality. The ROASEI has parallels with Big-Two and Biggest-One of Five-Factor framework. ROASEI has also been compared with reversal theory. Finally, personality “enhancement” with prescription drugs has been analyzed in the perspective of ROASEI.

2. Activities versus personality

It is difficult to define personality, but “two major themes

have pervaded nearly all efforts at grand personality theorizing: human nature and individual differences”¹. The efforts to explain personality are more than a century old, while I have recently proposed a new theory of activities, titled: reorientation of activities and self-environment integration (ROASEI).² I have also compared the new theory of activities with theories of needs.³ Activities are proximal to us, while needs are distal. In a similar manner personality may be considered a structure imposed on activities. We try to determine personality on the basis of activities—or on the basis of some of the activities. Moreover, divergent personalities have similar activities with quantitative differences. This makes activities a much broader concept in comparison to personality. Changes in activities can occur far more swiftly and over vast geographies than changes in personality. Some of us may think that personality influences our activities. They are placing personality at the center of the human beings. However, I consider activities at the center, and personality only as an offshoot of activities. Activities would, therefore, determine our personality and not vice-versa. We can, however, use the concept of personality to understand, predict, or explain activities. Evidently, changing a few activities can bring about significant changes in personality.

Vast changes that occurred during COVID-19 crisis were due to changes in activities—and not due to changes in personality. Wide ranging changes in activities of people in eighteenth century England occurred due to indus-

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trial and agricultural revolutions. Increased consumption of animal food, coffee, tobacco, and simple sugar, reduced physical activity, and a more stressful life—these were the changes that supposedly led to origin of angina.^{4,5} Our activities are continuously changing and the rate of change has progressively increased with technological, scientific, and industrial progress. The same cannot be said about our personality that remains relatively fixed. Thus, activities are much more dynamic and flexible, and it is far easier to bring about changes in activities than trying to change personality. Therefore, we need to give more attention to activities in comparison to personality.

3. A novel theory of activities

I have recently proposed a theory of activities, titled: reorientation of activities and self-environment integration (ROASEI).^{2-4,6,7} In that theory we “take a broadest possible view of activities, and for our purpose, whatever little action we undertook—during previous 24 hours, or during last week or month—every bit can be included in our activities like sleeping, breathing, eating, drinking, thinking, walking, worrying, getting angry, watching TV, and rest of the mundane things including sex”.⁶ These activities have been classified as restoration related (RR), growth related (GR), and adjustment related (AR) activities³—and they are quantitatively represented through pie charts called activities-circles^{2,3}. Each activities-circle has three pie slices representing three types of activities—RR, GR, and AR. In order to fulfil her needs, a normal (and even an abnormal) person would continuously manipulate her activities, with innumerable strategies, both intuitive and formal. These strategies can be collectively called reorientation of activities (see Figure-4, A).² Such reorientation of activities can be reversible, minor, short-term, or routine

that we carry out during the course of the day. Reorientation can also be longer term or major that is in response to a threat or imbalance of activities. For example, chronic cough may force a person to stop smoking, and detection of diabetes may force a person to change her dietary habits. When a person successfully stops smoking or changes her dietary habits, many other activities have long-term changes—often characterized by reduction in RR and increase in GR and AR, such a broad and persistent change can be considered a major reorientation.

4. Five factor theory of personality

In the broadest sense personality includes human nature and individual differences. Here I will focus on personality theories emphasizing individual differences that are sometimes called trait theories of personality. “Traits are consistent patterns of behaviour. More precisely, traits are behaviours that tend to be consistent across situations and across time, and hence provide a reliable and consistent way of describing differences between people. Personality traits were developed to predict these consistent differences in behaviour.”⁸

For nearly a century, personality psychologists have been striving to build a comprehensive model of personality traits. Gradually, we have conceived a hierarchical model, in which correlated lower level traits are grouped together within broader higher-level traits, sometimes called as Five-Factor framework (FF framework) (Figure-1). The Big Five occupies a special place in this framework. “According to the five-factor theory, there are five orthogonal (i.e., uncorrelated) dimensions of personality, namely neuroticism versus stability, extraversion versus introversion, conscientiousness, agreeableness and openness to new experiences. According to this theory, all (or almost all) variation in trait behaviour can be understood in terms of these five dimensions – which are commonly referred to as the Big Five.”⁸

The Big Five was first to be conceptualized. Later investigators searching for a higher-order level could arrive at the existence of Big Two.^{9,10} They found that neuroticism, agreeableness, and conscientiousness together can be represented by one single personality factor labeled as Stability—and extraversion and openness can be represented by the second factor labeled as Plasticity. The Big Two are placed just above Big Five in the hierarchy (Figure-1).

The existence of the Big Two means that at a higher level, people can be characterized by presence or absence of Stability and Plasticity. Stability and Plasticity address “two fundamental human concerns: (a) the need to maintain a stable organization of psychosocial function and (b) the need to explore and incorporate novel information into that organization, as the state of the individual changes both internally (developmentally) and externally (envi-

Figure-1. The hierarchical structure (levels) of personality factors within the Five-Factor framework.

Figure-2. Activities are stacked between biological control systems and personality. Strong parallels exist between ROASEI and trait theories of personality (big two and big one). Informet well-regulation-dysregulation⁸ exists at a level higher than dynamic balance of activities, which is on the same level as General factor of personality.

ronmentally).¹⁰

After Big Two, the next search was for a highest order level or the Big One. This led to the discovery of a single General factor of personality at the top of hierarchy of the personality structure within the FF framework.¹¹ Thus, personality structure defined by this framework comprises three higher levels: the Big Five, the Big Two, and the Biggest One. The entire structure of personality should be completed by adding lower levels of hierarchy (Big Five facets, items, and specific responses) as displayed in Figure-1.

In terms of Big Five, Big One is the combination of high versus low Emotional Stability, Conscientiousness, Agreeableness, Extraversion, and Openness. It represents emotionally stable, agreeable, conscientious, extraverted and intellectually open individuals versus neurotic, disagreeable, careless, introverted, and close-minded persons. In terms of the Big Two, the Big One could be characterized as the combination of high versus low Stability and Plasticity.¹¹

Hyland argues that those high in the general factor (plastic and stable) are more regulated than those low in the factor. “A network is dysregulated if it fails to exhibit stability and plasticity, and so the general factor of personality can be characterised as a factor of well-regulation–dysregulation.”⁸ Hyland uses his argument for emphasizing the parallels between the Biggest One of the FF framework and well-regulation-dysregulation of his general informet theory. Later in this article, I will be using the same argument of Hyland for characterizing the parallels between the General factor of personality (the Biggest One of the FF framework) and reorientation or dynamic balance of activities² in ROASEI (see Figure-2).

disease

The personality–disease relationship provides a description of how different types of people are more prone to disease than others. Hyland divides the personality–disease relationship research into two categories: “First, there is research that takes as its starting point existing personality constructs and dimensions. This research examines to what extent constructs that were developed for some other purpose (typically to predict other behaviours) correlate with health or disease states. This programme of research is conducted primarily by psychologists and in many cases health and disease are treated as part of a unidimensional construct (i.e., health versus disease). At least for some of this research, researchers are unconcerned with whether particular types of personality are linked to particular types of disease. Second, there is research that takes as its starting point the development of new personality constructs that are specifically linked to particular types of disease (e.g., heart disease versus cancer). This second type of research was started by medical researchers and continued by psychologists, and there is an assumption of specificity between disease and personality type– or state of mind. Over time these two research traditions have tended to merge.”⁸ My focus in this discussion will be mainly on a general relationship between health and personality or activities that is the first category of Hyland.

5-1. Five factor framework and disease

The five-factor framework has been briefly discussed above. Hyland has reviewed the relation between trait dimensions and health.⁸ At the Big Five level, neuroticism and extraversion are considered particularly important from the perspective of the personality–disease relationship. The mental representation of neuroticism consists of negative mood states—such as depression, anxiety as well as negative emotional states, such as hostility, guilt

5. Links between personality and

and fear. Mood is a signal of the internal state of the body whereas emotions are our responses to the external environment. Extraversion is equivalent to trait positive affect. Positive affect includes emotions such as excited, proud, inspired and alert. Whereas excessive negative affect can be considered a health problem, it is not common to consider lack of positive affect a health problem. If a person complains of depression, then clinicians will recommend treatment. If a person complains about lack of joy – but without depression – then they are unlikely to be recommended treatment.

The evidence in favor of personality-disease relationship comes from the studies involving factors belonging to the lowest level of Five-factor framework. For example, research has discovered strong links between positive (such as joy/happiness, interest/curiosity, and pride) and negative (such as fear, anger, sadness, guilt, embarrassment, and disgust) discrete emotions and health outcomes.¹² Negative mood states and emotions tend to occur together, and neuroticism can be considered a combination of these correlated negative mood states and emotions. Similarly, positive mood states and emotions also tend to occur together that is extraversion at the Big Five level. Thus, traits (neuroticism and extraversion) at the Big Five level have links with health outcomes.⁸

However, “higher neuroticism can mean having elevated scores on all items, elevated scores mainly on items related to anxiety and tension, or elevated scores mainly on items related to worry and vulnerability. ... people in the first group are at greater risk for poorer mental and physical health but that people in the latter two groups, especially those beset by worry and feelings of vulnerability, have better physical health.”¹³ Ability to differentiate between complex negative emotions such as anger and fear is called negative emotion differentiation. “For individuals low on neuroticism, negative emotion differentiation is a beneficial regulatory capacity that has substantial positive associations with later health outcomes. However, these health benefits did not generalize to individuals higher on neuroticism, suggesting that there are limits to the regulatory benefits afforded by negative emotion differentiation.”¹⁴ There is also evidence that traits are not static, and positively directed changes in traits are associated with positive health outcomes.¹⁵⁻¹⁷

Thus, the relationship between personality traits and health outcomes is a complex one. From our perspective, the most important property is that the traits are changeable. Mere identification of the trait may not be enough, as the lower-level components (facets and items) and the strength of a Big Five trait have been found to have important bearings on health outcomes. A direct relationship between Big Two or Biggest One factors and health outcomes is expected but not explicitly proven at present, and the same is likely to be a complicated one. These factors limit the practical utility of using conventional FF framework

for improving health outcomes in a larger population.

5-2. Disease prone and self-healing personalities

Activities have a strong bearing on our health. However, conventional epidemiological perspectives continue to consider only a few activities or the risk factors as relevant. This conventional approach has been considered too narrow. Friedman wanted us to have a capacious all-inclusive focus—and introduced two antithetical personality constructs termed *disease-prone* and *self-healing* personalities.¹⁸

Friedman’s argument was that so-called risk factors mostly do a poor job of predicting who will succumb. He iterated, “Most cookie lovers do not develop breast cancer, most couch potatoes do not suffer strokes, and it is even the case that most smokers do not develop lung cancer.” While more than a hundred years of personality research has given us a general verdict that “a person who is chronically irritated, depressed, hostile, impulsive, bored, frustrated, lonely, or powerless is indeed more likely to develop illnesses and to die prematurely than is someone who generally feels emotionally balanced and effective, is in a satisfying job, has stable and supportive social relationships, and is well integrated into the community”. Through his constructs, Friedman wanted to “direct theory and research away from associations between single predictors and single outcomes, focusing instead on multiple-predictor, multiple-outcome developments over long periods of

Figure-3. A very simple model of activities.⁶

time”.

There is something more that makes Friedman’s personality constructs interesting. Research has “generally found that similar sorts of individual differences were simultaneously relevant to a wide array of health outcomes”.¹⁸ This may simply mean that the causation (and therefore treatment) of many disorders could be possible on widely similar lines—say by converting a disease-prone person to self-healing person, as and when it is attempted through a broader change in activities. In a very similar context, we are deliberating on transdiagnostic (meaning across diagnoses) approaches to aetiological and therapeutic aspects of medically unexplained symptoms and syndromes¹⁹, and psychological disorders²⁰. That may be a reflection of a fundamental shift beginning in our thinking that still considers every disease different in its causation and requiring a specific treatment. “The hypothesis of the ‘disease-prone personality’ has never been successfully challenged. Despite the early psychosomatic enterprise assuming specificity, the data seem to fit a non-specific interpretation, namely that certain types of personality are unhealthy across a range of disease types.”⁸

It is our overall activities that represent or make our personalities. So, the constructs of Friedman can be paraphrased as—*activities of a disease-prone person* and *activities of a self-healing person*.⁶ The ongoing argument in this paper is that a disease-prone person can become a self-healing person (Figure-3), and this qualitative change can be curative also. So, a disease can be healing simultaneously, while a disease prone person is becoming a self-healing person. Thus (as expected) a comprehensive change in activities can bring about a fundamental change in the individual.

6. Personality as an offshoot of activities

Figure-5. Parallels exist between ROASEI and higher (Big One and Big Two) levels of Five-Factor framework. Left side of the Figure (A) is reproduced from the article introducing a new theory of activities.² The right side (B and C) looks at the parallels. See text for details.

I have proposed a Four-Step pathway of disease causation and reversal.⁶ That model has been reproduced in a simpler form in Figure-4. This pathway envisages social, educational, economic and other general factors at bottom. Activities are at the next step. Third step is controlling systems of the body comprising of brain, endocrine, and immune systems. The last step is diseases of the individual organs and systems. These steps interact in a composite manner leading to disease causation and disease reversal. Activities occupy a central and all-important place in this model. Yet we did not have a theory of activities, until I proposed one recently.^{2-4, 6} I continue to develop that theory through this paper. It is possible that we have tried to cover this deficiency by innumerable theories of personality. These personality theories are useful, but a theory of activities should be considered a welcome addition.

I am proposing here that personality is an offshoot of activities—and activities are wedged between environ-

Figure-4. Personality is an offshoot of activities.

ment or biological control systems and personality (see Figure-4). We can say that in all likelihood biological control systems or environmental factors are able to influence personality on account of their influence on activities.

6-1. Parallels exist between Five-Factor framework and ROASEI

Parallels are expected between activities and personality, if my proposal is true that personality is an offshoot of activities, or personality is a higher-level structure that we are trying to superimpose on activities. Here I will examine the parallels between Five-Factor framework and ROASEI.

Figure-5 tries to construct the parallels between ROASEI and higher (Big One and Big Two) levels of FF framework. Let us first come to stability and plasticity of the Big Two level. Stability means a stable organization of psychosocial function, and plasticity addresses the need to explore and incorporate novel information into that organization in continuously changing internal and external environments. Now from the perspective of activities, we have three groups of activities: RR activities that are concerned with restoration (or stability), and AR and GR activities concerned with adjustment and growth (or plasticity).³ Thus, a close similarity seems to exist between ROASEI and the Big Two level of FF framework.

Let us come to the Biggest One level in FF framework that is general factor of personality (see Figure-2). An argument has been made that This Biggest One has parallels to dynamic balance or reorientation of activities in ROASEI framework—and well-regulation-dysregulation in informent framework of Hyland. Here I will further this argument. In terms of Big Five, the Big One has been described as the combination of high versus low Emotional Stability, Conscientiousness, Agreeableness, Extraversion, and Openness. Thus, on one end are emotionally stable, agreeable, conscientious, extraverted and intellectually open individuals—and on the other extreme are neurotic, disagreeable, careless, introverted, and close-minded persons. In terms of the Big Two, the Big One could be characterized as the combination of high versus low stability and plasticity.¹¹ Thus at the highest levels FF framework has two opposite and relatively static traits.

Unlike relatively static traits of Five-Factor framework, ROASEI framework has two dynamic or interchangeable positions represented by two activities-circles X and Z (Figure-5, A). Positive traits (high stability and plasticity) are similar to Z (dominance of AR and GR activities), and negative traits (low stability and plasticity) are similar to X (dominance of RR activities).

Imbalance of activities versus reorientation of activities, these dynamic forces work at the top (Figure-5, A) to help us in controlling our activities² in a manner parallel to

General factor of personality determining personality at the highest level. Wide ranging negative changes in our activities can be expected in response to imbalance of activities that may occur due to multiple factors. But the individual is not a passive watcher, and a normal (and even an abnormal) person would continuously manipulate her activities, with innumerable strategies, both intuitive and formal. These strategies can be collectively called reorientation of activities. While imbalance is expected to reduce stability and plasticity, reorientation should be expected to improve stability and plasticity. Thus, imbalance of activities and reorientation of activities are opposite forces perched at the highest level in the control system of our activities.

Figure-5 shows three types of activities-circles X, Y, and Z.³ Type of the circle is decided by the dominant group of activities. RR activities have dominance in X (low stability and low plasticity), while AR and GR activities have dominance in Z (high stability and high plasticity). In Y (average stability and average plasticity) RR, AR, and GR activities are equally distributed. Two questions that need immediate answers are: why should X be low in stability despite dominant RR activities? And why should Z be high in stability despite modest RR activities? To understand this phenomenon, let us take a few examples. Major depression is characterized by low stability and low plasticity, yet RR activities are dominant in such illness.² On the other extreme are better than normal individuals, who have high stability and high plasticity, yet their RR activities are very modest.² We must remember that activities-circles are only a quantitative representation of activities. Thus, RR activities in X must be quantitatively dominant but qualitatively inferior—and the same in Z are quantitatively less but qualitatively superior. This opens up the possibility of improving the quality of our activities to fulfill our needs.³ In terms of activities-circle, this means reorientation of activities for moving towards Z from X (see Figure-5).

A large majority of individuals belongs to X and Y categories, so their RR activities have the space for qualitative improvement. This increases the significance of this shift or reorientation of activities. In case of Big Two also, the weight is tilted towards Stability, but a tilt towards Plasticity is possible. “Stability component (Neuroticism, Conscientiousness, and Agreeableness) overweighs Plasticity (Extraversion and Openness) in the Big One. However, the solution, where the Plasticity component would explain more variance in the Big One than Stability component, is fully imaginable.”¹¹

6-2. Comparing different stability perspectives: Five-Factor-framework, Reversal theory and ROASEI

Michael Apter through his reversal theory tries to challenge some assumptions of Five-Factor-framework. “In

particular, the theory regards the assumption that personality can be understood simply as a collection of static traits as too rigid to capture the essence of personality or account for the changeability of human nature. Instead, reversal theory argues that we are more complex, dynamic, and interesting than we are given credit for in trait approaches".²¹

Reversal theory proposes that that we switch or reverse between four pairs of opposite motivational states (Telic/ Paratelic, Conformist/ Negativistic, Mastery/ Sympathy, and Autic/ Alloic). Imagine a student, who after several hours of studying (Telic state), may go and play football for fun (Paratelic state). Opposite occurs when a person watching a movie on television (Paratelic state) suddenly finds that her wife is sick and goes into Telic state. A mentally sound person can easily manage such switches or reversals, which are necessary for everyday life. Let us say that ease of managing such reversals is the essence of a comfortable normal existence. But think of an anxiety ridden person, who for an extended period remains in Telic state without much respite. The opposite occurs when a maniac depressive lives only in a Paratelic state for his own and for others' detriments. Thus, Apter has been able to explain mental disorders in terms of abnormalities in switching between two modes. He called such abnormalities reversal inhibition and adoption of inappropriate reversal strategies—that means either switching between modes is suppressed or the strategies adopted for switching are inappropriate.

6-3. ROASEI as a meeting point of trait approaches and reversal theory

Here I am trying to position ROASEI as a meeting point of trait approaches and reversal theory. The later-two should be considered complementary—and not antagonistic, which the above account may seem to suggest. Fact of the matter is that David (locked in a telic state) is great example of a trait. "David, who is aged thirty-seven, has a problem that has taken control of his life. This is that he lives constantly in fear of harm, and a disproportionate part of his time is spent in protecting himself from it. Thus he fears harm from burglary, so that he repeatedly checks the locks on doors and windows. He fears accidental fire, so that he frequently checks the wiring of electric plugs. He fears being attacked, so that wherever possible he avoids contact with strangers. And above all he fears infection, so that he washes his hands up to twenty-five times each day, always takes two showers a day, cleans his teeth up to twelve times a day, flushes the toilet two or three times after use, and records all his feelings of ill health, however minor or transitory, so that he can make accurate reports to his doctor, whom he visits regularly. ... If we look at his case in reversal theory terms, we see that he is locked in the telic state so that, unlike most people, he is not revers-

ing back and forth between the telic and paratelic states in the course of everyday life."²¹

This brings us back to trait versus state debate. As the name would also suggest, reversal theory predominantly or entirely concerns itself with reversal between different states. Traits are defined as difficulty or inability (or inappropriate strategies being used) to reverse between states. This explains the dominance of states over traits in reversal theory. In this manner, reversal theory seems antagonistic to trait theories, which seem devoid of states—and where traits are considered static that is persisting over long periods of time and under widely different situations.

ROASEI instead focusses on activities, which can be considered the building blocks of both traits and states. But activities cannot be caged in traits or states. According to the current theories, traits are relatively stable, and states are reversible—while according to ROASEI, the activities are modifiable through reorientation of activities, with a purpose of self-environment integration. So, trait theories and reversal theory explain human personality, while ROASEI is a theory of activities. Moreover, ROASEI is a theory of change.²

Imbalance and reorientation of activities, the dynamic duo of ROASEI framework have already been discussed (see Parallels exist between Five-Factor framework and ROASEI). Broadly two types of reorientation of activities have been described.² First type of reorientation may be reversible, minor, short-term, or routine that we carry out during the course of the day. During exam time the activities of a student shall be centered on the forthcoming examinations (GR activities). Immediately after the examinations the same student is likely to go for enjoyment and fun (RR activities). This dynamic balance of activities reflects the perpetual prioritization of the needs of the individual. For example, a woman after her marriage may be devoting a lot of time to improve her personal appearance. But a childbirth she may become totally devoted to her newborn. Reversals of the reversal theory are analogous to minor or short-term reorientations of activities (see Figure-5, A). Longer term (unlike reversible) or major reorientation may also be in response to imbalance of activities (Figure-5, A). For example, chronic cough may force a person to stop smoking, and detection of diabetes may force a person to change her dietary habits. An individual who develops heart disease will do both: stop smoking and change her dietary habits. Interventions, targeting these activities, are also meant to effectively reorient the activities of the individual. Such reorientations occur with a longer-term perspective to deal with future and immediate threats related to loss of control and imbalance of activities. These are trait changes, and no parallels exist between major or longer-term reorientation of activities and reversal theory.

6-4. Quality of activities versus

inappropriate reversal strategies

Here I will focus on what Apter called an inappropriate reversal or strategy and defined it as the “one which leads to unnecessary distress—either on the part of the person who is indulging in it or others with whom he or she is interacting”. He further defined inappropriate strategies as “inappropriate ways of attempting to obtain and maintain the satisfactions intrinsic to that state and avoid the dissatisfactions”. Comfort and distress, satisfaction and dissatisfaction are closely related words used by Apter—and it looks like analysis of the obvious. Because we can also say that humans have evolved numerous (and often inappropriate) strategies for attaining life’s comforts and satisfactions, and for avoiding the opposites.

The perspective of ROASEI in this regard has already been explained to some extent (see Parallels exist between Five-Factor framework and ROASEI). Three activities-circles (X, Y, and Z) have been shown, in Figure-5, A. Low stability and low plasticity in X, despite having dominance of RR activities, is explained by inferior quality of RR activities—or we may say that RR activities of X are inappropriate.

Thus, the convergence between (ROASEI and reversal theory) these two different perspectives becomes obvious—and people, who have inappropriate strategies deeply imbibed within them, need to be helped (sometime coaxed) into adopting better strategies. In this way, ROASEI based interventions such as multiple activities change intervention⁷ can be seen as a help in developing and adopting more desirable strategies for attaining comfort. I prefer the word less desirable in place of inappropriate, and I will stick to that for simple reasons. Inappropriate has not been used by Apter in a moral sense, but as a word it is absolute and often disparaging—and another reason is that life routinely presents opportunities for adoption of more and more desirable strategies. Taking a cue from Apter’s jargon—appropriate and inappropriate have a bistable (having two stable states) meaning, in comparison more and less desirable can be considered multistable (having many states).

We must start by knowing what is less desirable. Let us look at examples of less desirable (inappropriate in his words) that Apter gave. Tobacco and other substance abuse are less desirable because that will give only temporary comfort. The same applies to risk taking behaviors such as unsafe sex and gambling. A child who gets her thrill by irritating her parents may use socially less desirable behavior such as using profanities, refusing to eat, not doing her homework, or beating her sibling. What Aster says makes sense, but he fails to put his views in a larger context. For instance, a person who makes excessive amount of money in life may be mentally robust, and he may be keeping everybody around him comfortable and satisfied. This will be acceptable strategy from Aster’s perspective. But from

the perspective of ROASEI, this will be considered less desirable.

We try to amass money for we may find ourselves more comfortably standing on a higher step of the social ladder. Many related questions should be asked. Is it easy to amass money? If say one hundred people begin to amass money, how many of them are likely to succeed in their mission? If money gets concentrated in few hands, what is the impact on the rest of the society? These are pertinent questions, and the answers are disturbing. It is not easy to earn large amount of money without unfair means. Very few will earn enough to successfully rise in social hierarchy and become comfortable. But even because of those who are trying the impact on the society will be adverse. We cannot simply amass (or even try to amass) money without harm to others. Under such conditions from ROASEI perspective, amassing money to become comfortable becomes a less desirable and a less practical strategy.³

Most of us unfortunately look at wealth as an end product, but Amartya Sen a Nobel laureate economist wants to promote the idea of wealth as means. “Economics is not solely concerned with income and wealth but also with using these resources as means to significant ends, including the promotion and enjoyment of long and worthwhile lives. If, however, the economic success of a nation is judged only by income and by other traditional indicators of opulence and financial soundness, as it so often is, the important goal of well-being is missed.”²²

This “having more—wanting more” phenomenon or the phenomenon of looking at wealth as an end product is explained by ROASEI using a different perspective. According to this perspective in our society most of the ‘rich and successful’ individuals have an activities-circle characterized by dominance of RR activities (Figure-5, A-X). They have wealth and status, but in the longer run they may also suffer from stress, anxiety, and depression. They may develop unhealthy lifestyles and suffer from lifestyle related disorders such as obesity, cardiovascular disease, asthma, backache, and tobacco use. Most importantly, they need a vision that would make them capable of using their wealth to achieve significant ends. Thus, creation of more wealth may be a RR activity, and not a GR or AR activity. A graphical account of the tragedy that struck a busy lawyer and his subsequent transformation has been given by Robin Sharma in his bestseller.²³

We may be looking for more and more wealth, but re-orientation of activities² can lead to a deeper fundamental change in us. Thus, we become capable of using the wealth that we have earned to achieve significant ends. Our activities-circle changes from X to Z (Figure-5, A). Simultaneously, our anxiety, depression, and stress are relieved. our lifestyle improves, diseases go away, and wellbeing gathers momentum.

This discussion has become focused on undesirability of amassing money as a strategy to become comfortable. Let us come back to other less-desirable strategies to become comfortable such as tobacco and other substance abuse, excessive eating, risky behaviors like gambling unsafe sex and drunken driving, violence and terrorism. From ROASEI perspective, amassing money or garnering power will be in the same category. Let us look at more of such less-desirable traits prevalent in our society, but ignored by the western psychological perspective—for instance discrimination on the basis of gender (female feticide, dowry, sexual harassment, and other forms of discrimination against women), cast, religion, language, disabilities, and economic status. These discriminations emerge from and lead to a multi-layered society having complex hierarchies. Justice and equality will remain distant dreams—unless we can find alternative strategies for comfort and satisfaction.

Through his reversal theory, Apter wants to reassert and re-establish the study of mental life in its original form, with least interference from biological and sociological sciences. In his words: “the starting point of all reversal

theory investigations is the subjective meaning that we assign to our actions—what we consider ourselves to be “up to” at different times. In anchoring everything in subjective experience in this way, reversal theory shows how the original definition of psychology—the study of mental life—can be reasserted and re-established. In other words, it shows how psychology still has its proper sphere and can be rescued from the threat of total assimilation into biology on the one hand and sociology on the other.”²¹

ROASEI, on the other hand, has no antipathy towards assimilating or in getting assimilated by widely different disciplines. This is because ROASEI is focused on integration of the individual with her many environments (see Figure-6).² This brings us to wider and longer-term meaning of stability inherent to ROASEI. An individual can perfect her Stability only by ensuring the Stability of these multiple environments. All of us want stability of our family, our neighborhood, our country, and our earth’s environment. We work for future stability, longevity, and disease-free existence.

Reversal theory is a top-down theory, while ROASEI is based on a bottom-up intervention that has been named multiple activities change intervention.²⁴

6-5. Is there a possibility of achieving and maintaining high Stability, while having low Plasticity?

We are often fearful of change. So, we resist change and try to remain as we are. In psychological terms we want to achieve and maintain high Stability, while having low Plasticity. That is, however, more or less impossible from a scientific perspective, because we have to continuously adjust with ceaselessly changing internal and external environments. This adjustment changes individual as well as the environment. Therefore, the individuals must have the capacity to handle change. Plasticity is essential for maintaining beneficial (stabilizing) interactions with environment. Lack of Plasticity is likely to destabilize an individual, and combination of low Plasticity and high Stability is an enigma.

Rich scientific discourse related to the above phenomenon exists. Some of which I have already discussed above and while comparing ROASEI with theories of needs.³ Here I would try to give a brief account of the same. Schumaker writes: “The satisfactions associated with many types of consumption have deviated so far from real sources of need that they are best understood as a type of irrational sensuality that has been stripped of all profanity in the vague hope that it can continue to generate excitement.”²⁵ From these words, an unmistakable conclusion can be drawn that is modern consumption is what Apter calls an inappropriate reversal strategy (see above: Quality of activities versus inappropriate reversal strategies). Consider

Figure-6. Self-environment integration means integration across multiple environments.

a common scenario: we are getting bored, and for reversal we go to a mall to buy goodies and to consume food and drinks. We can certainly have better (appropriate or more desirable) strategies to fight boredom, but our persistence with excessive consumption continues to grow. This is lack of Plasticity. Schumaker has found links between these patterns of consumption and mental illness.²⁵ So, modern consumption has failed to assist us in our quest for stability. This consumption seems to have extended to consumption of prescription drugs—a phenomenon, which has been particularly studied with antidepressants.²⁶ We continue to consume more of them, while the prevalence of depression continues to rise in our society. Our failure to make any amends in such dire circumstances can only be explained by lack of sufficient Plasticity in us.

In his ERG theory, Alderfer's seventh major proposition is "The more growth needs are satisfied, the more they will be desired".²⁷ We try to explain modern consumerism and capitalism as our unending quest for growth. By the same logic, we can also explain away our unreasonable quest for amassing money and power. I have already analyzed from a ROASEI perspective that—consumerism and amassing wealth/ power—these are RR activities (and not GR activities).³ In modern times these activities occupy a lot of space in our life, making our life RR dominant with low stability and low plasticity (see above: Parallels exist between Five-Factor framework and ROASEI). There I have already explained how low stability correlates with low plasticity, and high stability goes with high plasticity.

A large majority of individuals belongs to low stability and low plasticity category. In case of Big Two also, the weight is tilted towards stability, but a tilt towards plasticity is possible. "Stability component (Neuroticism, Conscientiousness, and Agreeableness) overweighs Plasticity (Extraversion and Openness) in the Big One. However, the solution, where the Plasticity component would explain more variance in the Big One than Stability component, is fully imaginable."¹¹ But in my opinion this tilt towards stability only means dominant RR activities (and not high stability), as discussed above.

6-6. A ROASEI perspective on usage of prescription drugs for personality "enhancement"

Humans have used drugs to enhance their psychological functioning since our ancestors discovered the mind-altering effects of plant derived preparations. Freud himself used and enthusiastically "pressed cocaine on patients, family, colleagues and friends".²⁸ Modern psychoactive drugs, such as barbiturates and benzodiazepines, are known to be addictive, but they continue to be prescribed today. "Years before this Freudian skid – and ever since – doctors have prescribed a virtually uninterrupted succession of addictive drugs for anxiety and the like, each time in the mistaken belief that the drugs would not cause

dependence or that it was the patient's fault if they did."²⁸

Pharmacological interventions outside medical settings are being increasingly tried today. This means giving prescription drugs to normal individuals for performance or personality "enhancement". During last century, in his *Listening to Prozac*²⁹, Kramer went gung-ho with the idea and introduced the term *cosmetic pharmacology*. Within a decade, claims were being made of widespread use of selective serotonin reuptake inhibitor (SSRI) antidepressants to modify mood and personality in nondepressed people, and that the stimulant methylphenidate was used widely to improve attention and school performance in normal children.³⁰

The usage of SSRI and stimulant methylphenidate are only a beginning. "And the next wave of drugs in the pharmaceutical industry pipelines will extend even further beyond mood and attentiveness. One obvious candidate, because of the increasing age of the 'baby boomer' generation, is memory. Drugs that are now being developed to treat memory loss in Alzheimer's patients could also be used to enhance memory function in healthy people. In addition, given the huge potential market for memory enhancers, therapeutics may be developed specifically for this purpose (Farah et al, 2004). Other drugs might attenuate unpleasant and traumatic memories (President's Council on Bioethics, 2003) or enhance 'executive function'—our ability to allocate our attention to difficult tasks in a sustained and efficient way (Farah et al, 2004; Hall, 2003)."³⁰

Unfortunately, the stakes are being raised. "Unlimited and unregulated use could coerce unwilling citizens into using enhancement technologies to compete effectively for education and employment opportunities (Farah, 2002). Such a scenario is not too far-fetched; critics point to the increasing abuse of performance-enhancing drugs in elite sports and the use of stimulants by school-aged children (Fukuyama, 2002; President's Council on Bioethics, 2003)."³⁰

It would be interesting to see such personality "enhancement", using prescription drugs, from the perspective of ROASEI. My assumption is that such "enhancement" is a part of the race for material possessions and consumption, and meant to intensify that race. Enhancement, therefore, is the right word for what the drugs would supposedly do. That is enhancement of the qualities that we already have. So, my assumption is that we have on cards the enhancement of already existing "having more—wanting more" phenomenon. The undesirability of that I have already discussed.

Some evidence for my assumption exists. SSRI are amongst the most researched class of drugs. "Empirical data are accumulating to suggest that SSRIs, when used non-clinically, can affect some facets of Neuroticism, with

most consistent support for a specific medication-related reduction of Angry Hostility.”³¹ On the contrary, sufficient evidence is lacking to substantiate the SSRI-driven change in other Neuroticism facets, such as Impulsiveness—and in Extraversion facets such as Warmth, Gregariousness, or Assertiveness. “Future data are needed to corroborate and extend the existing findings, as well as to determine whether, in non-clinical samples, reliable effects emerge globally at the trait-level, or whether they are confined to specific facets.”³¹

ROASEI on the other hand is intended for a fundamental change in the individuals through reorientation of activities, leading to dominance of AR and GR activities, as shown in Figure-5. Change that can occur following multiple activities change intervention²⁴ (a ROASEI based intervention) can be understood from the cases of resistant depression described here.⁷

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