

Is Personality a System? Stability, Process and Plasticity

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Abstract The nomothetic thrust of personality research has been the subject of some significant recent criticism. One major problem is the failure in much personality research to sufficiently scrutinize its methods and its background beliefs. This produces conceptual schematizations of personality that do not sufficiently take into account the disunity and plasticity that affects what is construed as personality; it also underplays the necessity of more fully theorizing the network of intrapsychic and transpersonal systems, processes, structures, templates, interfaces, flows of stimuli, qualities of embodiment and *contingencies* that dynamically manifest as personality. It is through unfolding the complexity inherent in this network that personality theorization can move forward in new ways. This paper provides a provisional, beginning taxonomy of this network in order to start a research dialogue about personality that doesn't begin with the operative background beliefs of nomothetic methodology, that doesn't tacitly or overtly construe the individual to be a self-regulating, homeostatic system, and that resists presupposing personality as a cohesive, stable quality of personhood.

Keywords Personality · Five-factor model · Plasticity · Plasticizer · Stabilizer · Contingency · Embodiment

Paper

Personality research, as much recent criticism has noted, fails in several ways to adequately assess its putative subject (Uher 2013, 2015a, b, c; Valsiner 2012; Toomela 2010; Giordano 2014; Larocco 2014)). First, it typically follows nomothetic protocols and aims to produce nomothetic results, as most scientific research does. It assumes in the fields of its analysis that it will find controlling patterns and the repetition of those patterns over time (Vogl 2015, p. 108). This means that most personality research postulates that it can and will find rules or regularities that

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determine crucial aspects of its subject—in this case human personality—thus, the use of factor analysis in the production of the Five-Factor model of personality (McCrae 2001, 2010; McCrae and John 1992), which produces inductive “inferences about stable latent traits” (Personality Project).

The problem with this approach has multiple aspects and dimensions. First, such modeling brackets out the singularity of phenomena, the analysis of which would require a more ideographic approach (Valsiner 2012, p. 198). This bracketing is paradoxical, since personality is purported to be a major conventional way of identifying singular individuality, and yet the dominant research approach to it has little interest in registering that singularity as such, or the significance of that singular in lived existence. A second problem is the use of the lexical hypothesis as the basis for such nomothetic research, as if the conceptualizations of the world produced in “natural language” and assessed by psychometric methodology can provide a non-distorting form for personality study (Uher 2013, 2015a, c; Arro 2013). What is not adequately addressed in the lexical hypothesis are the problems of translation and incommensurability in the differing registers of psychic modules, processes and social factors that comprise what gets understood as personality. The five dimensions of personality produced by various examples of this research (Personality Project) provide a descriptive taxonomy but not a real analysis of what personality is. In its investment in the higher order abstraction of personality’s purported dimensions, it disregards the need to untangle and theorize about the more specific constituents of what gets construed as personality, specifically the interacting *mélange* of affective tendencies, feeling rules, cognitive frames, semiotic repertoires, forms of memory, senses of embodiment as well as the semioaffective and cognitive maps and channels that link such phenomena and structures. Such a complex, multifaceted processual network may not translate into common language easily or well, and may not be well represented by being reduced to five controlling dimensions. More philosophically, in certain ways common language may simply be in part incommensurable with the phenomena it attempts to represent. While a constructivist theory of language may push the notion that language systems construct one’s world (as in the Sapir-Whorf hypothesis [Lucy 1996], but also true of structuralism and, to a lesser degree, poststructuralism), there is little evidence that all mental or cultural phenomena are simply or perhaps even predominantly an effect of lexical formats (Pinker 1994).¹ Consequently, much of what personality is may not register or register accurately in common language. This is true even if psychic processes are largely semiotically mediated. A third problem is that personality research constructs personality as an object that complies with its methods rather than investigating personality in the complexity of its singular occurrences, perhaps as an open, hybrid network as suggested above rather than as a tacitly self-regulating, stable system (Uher 2015c; Valsiner 2012). Uher’s recent work (2015a, c) details other significant problems with dominant modes of personality research, such as its failure to recognize that transpersonal and intrapersonal analyses are not isomorphic and its tendency towards circularity of explanation.

The crucial problem, however, is not with the notion of nomothetic (or psychometric) research as such. Rather, the crucial problem is that the field’s nomothetic

¹ Pinker’s rejection of linguistic relativity, however, is too strong.

predilection means, as I have suggested, that it largely ignores trying to theorize the dynamic interplay of multiple, diverse psychic and social systems, frames, maps, registers, processes and phenomena, which comprise the emergent processual effects that get conceptualized as personality. Too often the problems that research solves are the limited, abstract ones created by the research methodology itself. Moving towards an ideographic method, however, does not fully solve this problem, as the idiographic may provide a means to foreground the singular as an inherent dimension of personality, yet it may not fully or sufficiently reflect on its own biases in how it constitutes its object(s) of study. The use of the category of the individual and of the psychic “inside” (the positing of the psyche as an autonomous system) both receive too little scrutiny in some of this work, and often function as “natural” rather than provisional categories. One way of addressing the limits of the nomothetic and ideographic approaches would be to use a method that supplemented those approaches with a certain version of abduction that functions in a way that resonates with aspects of the hermeneutic approach to textual understanding articulated by Gadamer (1975). Gadamer’s method for interpreting texts and works of art involves a constant recursive, heuristic process of insistently revising one’s ongoing understanding of the *object* of study (and not simply hypotheses about that object of study) as that object gets appraised by, clarifies and yet resists that understanding, which then alters that understanding, which then alters the object, and so on, in an ever tightening but unending recursive spiral of explanatory interpretation and inquiry. As with abduction, the concern is with the best, most complete explanation, but crucial to Gadamer’s method is the need for every explanation to be retested perpetually against the evidence, as any explanation alters the perspective towards the evidence itself. The process keeps reconfiguring both the perspective that generates explanation and the object of that explanation. This version of what is termed the “hermeneutic circle” recognizes the ongoing, mutual construction of subject and object in the always provisional processes of understanding.² The point here is not to treat either personality or psyche as a text, but rather to foreground the necessity of recognizing that research methods need to build into their processes a continual reconstruction of the *object* and the preunderstanding of that object of study (its background understanding), while simultaneously submitting to possible reconstruction the understandings and preunderstandings that underlie any particular methodology and the biases that haunt it. Such a hermeneutic, abductive supplement to the nomothetic (paradigmatically inductive) and the ideographic possibilities of personality research would facilitate a more dynamic, fully exploratory engagement with the complexities and specificities of the subject of inquiry; that is, it would promote a critical tracking of the provisionality of the “object” under scrutiny as that object gets reconfigured and altered by inquiry itself in a recursive looping. The best scientific work already entails much of this process, what I might call recursive, reflexive, supplementary abduction, but much current personality research manifests instead a hardening of inductive methodology into orthodoxy and a reifying of the object of study (or its five “factors” and related traits) as if it (they) were a thing and not a constructed precipitate of particular frameworks of understanding and the background paradigm that produces them (Kuhn 1996). In other words, what has happened is that

² The parallel is not full. Gadamer’s aim is a “fusion of horizons” with the subject being interpreted. I’m only thinking about a process of continually revising one’s configuration of the subject of study as one studies it.

personality research, dominated as it has been by a nomothetic agenda, inductive, psychometric methodology and the production of the Five-Factor (or Big Five) model, has created limits to inquiry by its choice of method, and it then treats those limits not as biases or obstructions or hindrances but rather as reflective of the truth of the object itself being studied.

Specificity, Complexity, Plasticity

A theory of personality first of all needs to imagine provisionally what “personality” actually is, and this is, initially at least, a hermeneutic, abductive problem. As philosophers of science have suggested, abduction typically precedes or intricates itself with induction in almost any scientific endeavor (Douven 2011; Lipton 1993), as one must infer much of one’s field of inquiry and how it may fit together in order to construct an object on which inductive methodology can be deployed and to be able to decide amongst alternatives. The illusion of induction is that it starts with evidence, with phenomena as such, and then uses hypotheses to organize that evidence, conceived as data, into organized patterns that are true. Evidence, however, is never raw phenomena, or factual, but already itself a conceptualization, however rudimentary, a gathering and differentiation of phenomena, based on background beliefs (Lipton 1993).³ Nonetheless, one must always start somewhere, with the provisional construction of objects. Consequently, as a start to thinking about the specificity of what personality is, one might conventionally suggest that that term refers to an individual’s pattern of behaviors and dispositions, both overt and latent, that display some degree of stability or consistency over time. Uher (2015a, p. 41) notes the problem of the conceptual looseness of such kinds of definition, which specify an object of study but do so without sufficient precision or critical reflection. Nonetheless, some such definition of personality resides as a tacit preunderstanding or background belief used by much nomothetic personality research. Crucial to this definition is the implicit notion that there are consistent qualities (traits) that “belong” to an individual, and that they recur over time in similar forms. Thus, such a notion of personality hinges on two axes of stability, a temporal one (though time continues to mark change the individual displays atemporal patterns of behavior, feeling and orientation to the world), and a distinguishing one (these qualities manifest in individuals as *characteristics*, as manifestations of a character, and that manifestation is particular to the individual and a cause of differentiation).

Such a provisional definition immediately raises problems, however. First, how stable are such stabilities, and how much do they simply manifest a “common sense” apperception of personal life? As Uher (2015c) has argued, such stabilities can never be directly observed; they are the effect of inferences made over time—they are or require abductive inferences. Further, though researchers have asserted that a person has fundamental templates of emotional and affective response, such as temperament, which may be precursors or provide a substructure for personality but are of a lower order, and that such templates remain predominantly stable over time and which can be observed not long after birth (Kagan 1997), one could still ask (as Kagan does to some

³ All good science already knows this, but often forgets it in practice.

degree) to what extent temperament actually overlaps with, contributes to, and/or fashions what is perceived as personality, and to what extent is temperament's purported stability a translation of statistical regularity into reified qualities? The larger question is this: to what extent does the search for stabilities suppress plasticities of various kinds (or degrees of plasticity) as a crucial aspect of personality (such as developmental plasticity, situational plasticity, affective plasticity or social plasticity)? A second problem relates to the notion of an individual, which is often defined as existing in isolation from others, particularly in relation to its own experience of self and world. As a consequence, individuality, and its corollary, personality, are often construed as private and independent (as products of "interiority") rather than as ineluctably social phenomenon, as if the individual can be disarticulated from the social environment. The notion that an individual "has" a personality constructs personality as something that, even when socially displayed and perceived, remains a private, unified quintessence, an expression of core qualities rather than an interactive, partially labile effect. The notion of personality as a manifestation of hybrid open networks and processes, as in part a social phenomenon, or as an effect of the contingent interactions of constituent modules (Kurzban and Aktipis 2007), is largely foreclosed from the outset through this kind of assumption. The idea that aspects of personality are transindividual or non-individual is not sufficiently thought, and therefore not readily available for inquiry. Third, such a conventional definition of personality suppresses what I consider to be the most interesting problem of personality research: whether personality is merely an attributed quality, a reified fiction generated by the desire of others to perceive consistencies in behavior and to see those consistencies as fixed characteristics, or whether the notion of personality actually corresponds to something "real," even if that actuality is an effect of a wide, interactive range of mental, bodily and social processes and networks, which are provisionally stabilized by various sorts of systems, structures, modules and maps, and which produce both regularities and plasticities. It may be that personality is both an effect of a certain kind of social perception and a phenomenon of provisionally coordinated, contending, regularizing processes, some of which are regulated and relatively stable, some of which are adaptive and relatively plastic. Much personality theory, such as the Big Five or the Five Factor Model, fails to adequately differentiate between these frames, between personality as a phenomenon of social and/or self-perception (as a cultural/lexical effect) and personality as a phenomenon of interactive, conjoined processes, systems, modules, networks and affective flows. This generates some confusion in the research. The lexical hypothesis, for example, imagines that words that attribute characteristics allow insight into personality's constituent dimensions, that perception is, when inductively reconstructed, reality. There are problems in this of both translation and incommensurability, as was mentioned earlier.

A theory of personality that attempts to account for the specificity and complexity of personality formations as they occur and manifest themselves in human social life needs to begin to assess the dynamic web of factors that affect the phenomenon conceptualized as personality. This phenomenon includes, as I stated earlier, affective tendencies, feeling rules, cognitive frames, semiotic repertoires, forms of memory, habituated responses, normative pressures, patterns of mood and attention, and senses of embodiment as well as intrapsychic maps and channels. The latter provide infrastructures and guiding networks that fashion persons' potential for unconstrained

adaptive plasticity into relatively regularized iterations of behavior and response. In this mélange of constituents, there are tensions between atemporal forms, structures and systems, temporal processes, and adaptive forces and incentives, as well as between the feelings that are experienced as “inner life” and the largely inseparable but purportedly differing effects of social life, of life with others. There is no foundation or ground in this, nor even an overarching system, but rather an interactive, constantly adapting, stabilized, entangled, provisional connectedness, producing an emergent series of performances to be monitored, disciplined and thereby partially stabilized by both “self” and others.

This description of the webs of constituents that when fashioned into habituations of feeling and performance underlie what is recognized as personality raises crucial questions: How do these constituents actually interconnect? What kind of network or matrices do they form and what are its (their) characteristics? Under what conditions (situationally and developmentally) do such interconnections occur? Are there problems of translation in the interaction between constituent elements and forces? Are there problems of incommensurability? What provides this network with the provisional stability that allows it, first, to actually function as a network, and then to be recognized as personality in some form? How consistent or effective is such stabilization? Do the stabilizers themselves change or adapt (for physiological, developmental, situational or temporal reasons)? If so, what is the effect of such change? Finally, is there only one or are there several stabilized repertoires or compartments of feeling and performance? In other words, does a person have only one iteration of personality or is personality a plural phenomenon, with a person adjusting situationally with different iterations of stabilized response forms?

A Sketch towards a Theory

To begin to address these questions, one needs to begin with a provisional sense of how these constituent factors (modules, processes, systems, structures, networks, etc.) engage with and influence each other. One possibility is to posit the individual as some kind of integrated, homeostatic system (Damasio 2010), and to treat personality as being a manifestation of what one might call “default equilibria,” that is, recurrent stabilized feelings and responses that respond, adapt to and influence life situations and events. Such default equilibria would manifest a person’s efforts to effect consistent, functional responses to environmental and internal disruptions and to regulate itself as a system. There is a distant whiff of Freud in such a version of the individual, given Freud’s theorization of the ego as an agency of homeostatic adaptation and his hypothesis that homeostasis is the dominant aim of the pleasure principle (Freud 1990; Arminjon et al. 2010). But besides there being a fundamental confusion or tension in Freud about just what homeostasis is (whether it is a balancing or adaptive managing of excitations, and associated with the life instincts, or a cessation of excitations, and associated with the death instincts (Laplanche 1985)), this model posits a structure that may be too unified at the outset. There is a significant difference in conceiving of oxygen blood level as homeostatically regulated and imagining that a person’s behavior as a whole or the enacting of personality has the preservation of some kind of homeostasis as its primary aim. Valsiner’s notion of autoregulation occurring

through a stratified semiotic hierarchically addresses some of these issues, positing a system that is interpersonal even if still “intensely private” (1999, p. 26). There are problems even in Valsiner’s model with such a controlling functionalist assumption, as it doesn’t consider fully how many behaviors, in the moment, work against much homeostasis. Sexual arousal and activity is only one example. Consequently, personality theory may benefit from treating the individual and personality as possibilities to be specified rather than as foundational assumptions (background beliefs) based on some simple notion of self-regulative, implicitly functional unity. Conceiving of a person as an individual homeostatic system forecloses some of the complexities and problems that personality research ought to be trying to specify more precisely and unfold. Homeostasis may be one constraint on the plasticity of affective arousal, circulation and discharge, but it may alternatively work as a subsystem and not at the level of the organism as a whole. It may not be a global motivating force, except in extreme circumstances. Consequently, it may manifest one dimension of organismic functioning, but there still may exist a variety of mental/bodily forces and dimensions that recurrently supersede homeostasis, directing the organism towards desired states of disequilibrium (one might think here of going on a roller coaster or binge eating or sex, etc.). Such engagements with disequilibrium are also construed as manifestations of personality.

In order to construct a theory of what personality is, then, it is crucial to provisionally set out its constituent parts and factors as well as the webs and networks that connect or entangle them. Some of these constituents are psychic, some are psychosocial, and some are situational/environmental. Crucially, they are not all “internal.” Personality in this framework is not, in any strict sense, personal (Larocco 2014). As a first take, the following is a kind of taxonomy (non-exhaustive) of component elements, processes and complexes, organized according to the kind of effect they exert. First, there are mental subsystems or processes that arouse, energize or provoke, typically in response to stimuli, whether largely intrapsychic (for example, affectively charged memory or hunger), environmental, such as a perception of danger, or both (sexual arousal, anxiety). This category includes much of emotional life, though it is important to note that these affective subsystems and forces of arousal may not be unified or work in concert. One can be both angry and wanting attachment simultaneously and from the same person. Ambivalence or heterogeneous arousals and their recurrence may occur in relatively consistent, patterned ways, and consequently can function as an aspect of personality. Arousals and energizers tend to destabilize, however, at least momentarily, psychic coordination and composure, though the *patterns* of such destabilization may be characteristic of a given person and so may be drawn on as aspects of personality (as can volatility or inconsistency itself, as a characteristic or trait).

Second, there are stabilizers in these processes and networks, which can be intrapsychic, transpersonal and/or environmental. Intrapsychic stabilizers include cognitive maps, networks, forms and channels that provide some fashioning and composing of the flows and vicissitudes of arousals. Much of this is learned or conditioned, such as cultural “feeling rules” (Hochschild 1979) that produce emotional profiles by constraining some flows and arousals and facilitating or easing others. Such “rules” may be semiotic, that is, defined by a culturally schematized mapping of emotional reactivities and intensities, but not lexical or semantic in a strict sense. Or they may be

more conventionally semantic; Valsiner's notion of semiotic demand settings and semiotic mediation fields is useful here (2003, 2006). Additionally, affective arousals and flows are to some degree individuated, fashioned by one's specific emotional history and the ways in which that history conditions one to feel certain ways in certain situations, creating individually habituated responses that one reactivates situationally (volitionally) or that are environmentally triggered (non-volitional). The interaction of feeling rules, semiotic demand settings and developmental conditioning fashions affect, provisionally, into dispositions, habitudes and inclinations, which fosters regularized feeling and behavior.

A related stabilizer is memory itself, which in its different forms constructs multiple perceptual-cognitive maps and informational possibilities that, when aggregated and organized, can chart a self-history (Damasio 2010) and thereby facilitate the ongoing construction of individual identity (with an attendant personality). The most salient memory form for this purpose is autobiographical memory, which works to take the *mélange* of vignettes, episodes and feelings of one's remembered past and forge it into a cohesive self-story. There is a recursive loop between the ongoing construction of this memory and its often non-conscious operation to incentivize some responses to arousal as being "within character" while inhibiting others as being "out of character." A person may also have more than one autobiographical narrative, each of which may compete for or situationally exert operational force.

Semiotic systems are another provisional stabilizer, and are invariably transpersonal. The best example of a semiotic system is language, which as the lexical hypothesis supposes, brackets reality into consistent forms and categories, which then come to define reality as such. The problem of reification—that language tends to turn processes or categorizations into things—may be a problem philosophically, but is beneficial to the work of stabilization, for it helps to valorize semiotic-cognitive maps and channels as secure, substantive and real. Language becomes a repository of relatively fixed, "natural" forms, and the assimilation of portions of this framework provides scaffolding for composing arousals and other plasticities. One might also consider here Schweder and Sullivan's notion (1990, p. 402) that the semiotically constructed "meaning" of situations "is a major determinant" of response. Here, it is situations rather than entities that involve semiotically stabilized responses. Additionally, as Bourdieu notes (1993), the inculcation and deployment of other, non-lexical semiotic markers (postures, gestures, emotional displays, rhythms and kinds of movements, a "style," etc.) also present regularizing possibilities, which as they are reactivated situationally, as they fashion routine responses, cue the perception of behavioral consistency through which personality is constructed and recognized.

Finally, there are environmental stabilizers, such as the forces of interpellation (Althusser 2001; see also Mead 1956). Interpellation is the sense a person has of being recognized by others in consistent ways, as existing in a role or subject position. The idea is that one is "called" into regularized forms of self by external expectations of those forms. Others don't treat a person as a new being after repeated encounters (or even initially); rather, others treat one as a consistent being of a certain social/historical niche, and these expectations typically cause a person to adapt or conform to these expectations. Interpellation works in concert with the semiotic webs of distinctions and the social forces attached to those distinctions that organize and stratify social life (Bourdieu 1986). There is an ongoing recursive process between the way in which we

are recognized and treated by others and one's continually adjusting patterns of feeling and behavior. However, it is important to note here that persons are interpellated differently by different others, so a person doesn't have only one socially interpellated social place or identity. This fact may bring out different "personalities." A teen who is cautious and introverted around adult authorities, for example, may be adventurous and extroverted around peers, as expectations about whom that person is and how she should perform shift the behavioral performance of self that marks personality. Interpellation generates external incitements and constraints to particular personality forms, fashioning and stabilizing their situational emergence. It gives a person other-specified characterological expectations and pressures, which institute behavioral pressures that direct self-presentation into predetermined frames.

A third component aspect of personality is attentionality, that is, the awareness and interest that different parts of the psyche manifest in relation both to environmental and intrapsychic stimuli. Attentionality is an effect of sensitivities and focuses of various kinds. In itself, attention is neither arousing nor stabilizing, but it can affect either as it has the potential to shift psychic energies and processes from one network of percolating, active recursion to another. Attention in this sense is a non-reflexive form of valuation; what draws or *captures* attention, however ephemerally, both registers values and affects values. People are affected by what they pay attention to, and, to some degree, may be defined by how and to what they pay attention. Correlatively, inattention or *non-attention* also manifests habitudes that can be recognized as characteristic. A person who does not, or *will not*, attend to certain stimuli and/or perceptions is displaying a patterned response that can register as an aspect of personality. There is a non-personal, or better, non-volitional, dimension to this, as attention may fixate on (or deny) certain stimuli against one's will (fetishes are the exaggerated form of this everyday occurrence, as is the inability to remember certain events). The *patterning* of attention, when and as it occurs, is a significant aspect of what registers as personality. The personality of one who is intensely or anxiously engaged with the minutiae of the immediate environment or one's bodily states is perceived and exists very differently than one who is oblivious to those same stimuli. Because such patterns of attention suggest an orientation or orientations to the world (both intrapsychic and environmental), they affect how a person is characterized and how a person characterizes herself. Attentionality, in its patterns of fluctuation, exerts both social and reflexive influences on self-construction and performance.

A fourth constituent or, perhaps better, appurtenance to personality is mood or patterns of psychic tone and baseline arousal. Conventionally, mood has been often associated with personality in psychological literature (Meyer and Shack 1989). Moods that last for long periods or which occur in recurrent patterns often become crucial correlates of personality—a person can be characterized as depressive, sunny, anxious or sensitive, all of which refer to mood patterns as dispositions. Such attributions treat long-term affective tones and patterns as something like traits, and construe such traits as salient dimensions of personality. Much more ephemeral effects of affective tone, however, may also influence behavior and feelings in much less strictly characterizing ways. A person's behavior and attitude towards oneself or others may vary considerably with subtle shifts in affective tones. Moments of pain, for example, may affect

mood and produce irritability or social withdrawal. An additional aspect of mood is one's mood *structure*, which is different than one's mood patterns.⁴ Mood structure refers to the particular palette of affective tones that one feels and how intensely one feels them (what moods are available, which ones are easily facilitated, which ones resist emergence, etc.). Mood structures may not simply create patterns—the tone of what one feels may still fluctuate without much regularity—but it does so within and across preformed templates. If one never feels elation, that becomes part of one's attributed personality. Even though one never has the mood in question, it affects self-performance, and a term such as anhedonia may not capture this, as one may still feel powerfully other moods and emotions and have no sense of a loss of feeling. In this instance, it is an absence and not a trait that undergirds personality attribution.

A fifth constituent of the personality matrix is one's mode or, perhaps better, one's *sense* of embodiment. This factor is almost entirely absent from conventional personality research, which remains tacitly enmeshed in a residual Cartesian dualism. Posture, weight, frame, physiognomy, health, and so on all affect how one senses one's embodiment (as empowerment, as weakness, with wonder, with horror, with grief, intensely, distractedly, etc.); they all influence possibilities and patterns of behavior, how one conceives oneself (reflexively and through autobiographical memory), as well as the attributions and interpellations of personality made by others. Bodily changes, fluctuations and alterations affect other constituents of the network of processes and forces that feed into the patterns that get construed as personality. For example, personality attributes such as social confidence are often powerfully contingent on bodily form and a sense of oneself as embodied. Something as simple as illness or a visible cold sore may change the personality tendencies that one exhibits to others, muting extroversion perhaps, or adventurousness. If bodily form or vitality changes, either negatively though impairment or positively through enhancement, personality will typically change with that change. Chronic bodily discomfort, for example, may shift one's own and others' sense of one's resilience, as well as the living out of one's palette of moods. This is a place where ideographic research would be especially useful.

The point to be made here is that qualities of personality that appear to be stable—traits—are actually contingent on phenomena or structures that are not considered to be part of personality at all, such as bodily form, and which are to some degree labile. There is a constant recursive process of monitoring and reconstruction that occurs between certain personality traits, bodily form and relative vitality (the latter is labile and changes in daily, seasonal, developmental and mortal time frames, as, to a lesser degree and in incommensurable ways does bodily form itself). Embodiment and personality, as these examples sketch out, conjoin through hybrid, heterogeneous feedback webs that cannot be disentangled or separated. Personality cannot be separated from embodiment with all of its contingencies. In this sense embodiment is a paradox in its relation to personality: on the one hand, its fluctuations institute alteration and change that destabilizes certain personality constituents; on the other hand, it is embodiment that provides the sense of unity and stability that fosters the holistic characterization of hybrid networks and processes as personality in the first place. It

⁴ It is also different than research that asserts a circumplex model for mood, based on lexical analysis (Feldman 1995).

is coming to terms with embodiment, to some degree, that sparks the whole conceptual apparatus of the individual, and its correlate, personality.

A final constituent of personality, one that unsettles unity or stability, is what I would call plasticizers. Plasticizers are forces and processes that work against the stabilizers that produce the patterns that are perceived and attributed as personality. Plasticizers produce lability in behavior, self-appraisal and self-performance. Generally, plasticizers are forces or inputs operating within or on the personality apparatus that tend to promote change, vacillation, adaptation or alteration. Plasticizers, however, don't make personality simply a stochastic process, as Giordano suggests (2014), but rather an active interplay between forces that animate change and stabilizing structures and systems that constrain change and the effect of contingency. An easy example of this are the processes of maturation or aging, through which an individual undergoes constrained alterations that nonetheless facilitate the enhancement/growth of certain psychic organizations, feelings and qualities and the recomposing and inhibition of others. Levels of impulsiveness, for example, typically change (they predictably diminish) as one develops from a child into an adult (of course one may remain more or less impulsive than one's peers as this change occurs, but the change nonetheless alters one's *own* level of impulsivity). Similarly, erotic forms of pleasure and feelings also change as one develops and ages. These forms of plasticity remain, however, fairly organized. More radical, everyday plasticity also occurs, an effect of somatic fluctuations such as hormonal variances, alterations in blood sugar, body temperature, and environmental effects such as chance meetings, the tone of regular interpersonal contacts, impediments to goals, weather conditions and so on. Personality (often through changes in mood) alters in response to such everyday contingencies, as one puts out self-performances (comportments) that manifest the influence of such happenstances, which can affect, moment by moment, whether one is lethargic, calm, irritable, anxious, generous, difficult, self-assured, etc. The issue here is that the hybrid, heterogeneous feedback and motivating webs that manifest as personality are beset by fluctuating, accidental and sporadic influences that make lability and plasticity part of the generating dynamics of personality. Conceptually, personality research needs to *include* contingency as inherent in the actualization of personality rather than treating it as "external" disruption, as "noise," which personality responds to in predictable, controlled (and controlling) ways. Recognizing that plasticizers are an inherent part of what gets construed as personality is crucial in conceiving of it in a processual rather than reified way.

Another significant dimension of plasticity has to do with the relative sensitivity and reactivity of one constituent of the network to another. Sensitivity of some network components to others can accelerate or amplify certain kinds of response, while nonreceptivity can inhibit responses as well. Sensitivity and reactivity here refer to ways in which network processes may interface: either through thresholds, in which the affect of one component on another needs to reach a certain level of stimulation in order to trigger a response; or through cumulative linear influence—that is, that the response in one system corresponds in relatively linear ways to the influence of another and increases in proportion as it receives stimulation. The threshold response itself may not be simple. Response may come in a stairstepping of thresholds in which increasing stimulation creates one kind of response as it crosses one threshold, and a very different kind of response when it crosses another, higher one in the same interface. Traumatic

stimuli may function this way, producing panic after crossing a mid-level threshold and depersonalization and dissociation after crossing a higher one. If a person were non-reactive, however, even horrible experiences might not trigger dissociation, with its effects on personality; that threshold might never be crossed. Ongoing reactivity and susceptibility will determine, in some ways, just how powerful and labile the effect of something like dissociation on personality becomes. And such reactivity may well fluctuate with mood, with emotional and environmental effects, with changing repertoires of cognitive/semiotic structuration (such as alterations in autobiographical memory) and so on. Less dramatically, how affect interfaces with, blends with and rouses cognitive processes, which fluctuates in some ways moment by moment as reactivity and sensitivity changes, is crucial in determining how a person might respond to a situation and how one feels about it.

Of course, reactivity itself may display different levels of plasticity. There may be aspects of sensitivity and reactivity (infrapsychic, transpsychic and extrapsychic) that are relatively consistent over time; some people are very sensitive to sensory stimuli, while others are not; some are very susceptible to pain, while others are not; some are very sensitive to proprioceptive and interoceptive fluctuations, while others are not. But sensitivity/reactivity is typically not, in its microdynamics, consistent. It fluctuates and shifts constantly as the webs of processes that define mental life do their work. A person who normally is placid and composed but suddenly erupts over a repetitive bird call outside, an eruption that appears “out of character,” may well be acting within character if character (and personality) is recognized as an effect that incorporates plasticities, such as the situational lability of sensitivity and reactivity.

In this vein, an even more deeply disruptive source of plasticity is the noncohesiveness that is an inherent part of the psychic apparatus itself, a noncohesiveness that is only in part managed by self-regulating psychic mechanisms. This non-cohesiveness has two aspects: there is modularity in the brain itself, with cognitive and emotional processes frequently occurring in limited brain areas that often don't interface directly or well with each other (Kurzban and Aktipis 2007); there is also the sense that differing systems and processes of arousal often compete, and that there may be no overarching executive function (an avatar linked, in some ways, at least in common thought, to personality, which then registers tacitly in everyday language—in lexical material) (Gazzaniga 2011). If the differing networks of mind are in a complex set of relations mixed between difficult or obstructed interfaces, competition, interactive facilitation, stimulation, inhibition, etc., if contingency and plasticity are an inherent aspect of this web, and if personality as a constructed effect is one outcome of this entangled interplay of hybrid, heterogeneous feedback webs, then research that aims to simply “find” (ascribe) axes or dimensions of personality may not tell us much about personality as it actually exists as a processual phenomenon. Non-cohesiveness as an abductive hypothesis of mind is worth exploring as a supervening supplement to the nomothetic investment in regular traits, in what is continuous and stable over time. If the constituents of the web of processes, structures and contingencies of which personality is the epiphenomenon are fully taken into account, then the notion of mind as a hierarchal system with cooperative, stable integration may not seem so evident.

Conclusion

Personality research has come to a plateau or impasse of sorts. In the Five-Factor and Big Five models, it has produced descriptive lists of traits or dimensions of personality that specify component parts at a fairly high level of abstraction. This framework implicitly treats personality as a hierarchically integrated network of interacting dimensions. Personality, as the effect of the consistencies in these interacting dimensions, is the ghost in the mind's machine. But perhaps it is time for an exorcism—at least a partial one; for in assuming a relatively simple version of psychic integration, such models and the research methods that produce them avoid or deflect the complexity, plasticity and forces of non-cohesion at work in psychic functioning in general as well as in the construal of personality. If one instead conceived of personality as an effect of hybrid, heterogeneous feedback webs, with contingencies and plasticizing factors as part of even provisionally dominant web organizations, research into personality would look quite different, as both its object and methodology would need to change. Nomothetic, inductive work would still be a part of its agenda, but would occur with a greater degree of critical reflexivity. One might treat with a higher degree of skepticism the “truth tropic” (Lipton 1993) thrust of inductive, nomothetic research. To look at personality as an embodied process, one that may not be unified or cohesive and that undergoes fluctuations and more large-scale changes over time, is to open personality research up to a new set of background assumptions and beliefs that would produce different research agendas, ask for different methods, and produce different results. In a postmodern time when personality seems to be becoming increasingly labile even in common discourse, such an agenda may have its merits.

References

- Althusser, L. (2001). Ideology and ideological state apparatus. In *Lenin and philosophy* (85–126). New York: Monthly Review Press. (Original work published in 1971).
- Arminjon, M., Ansermet, F., & Magistretti, P. (2010). The homeostatic psyche: Freudian theory and somatic markers. *Journal of Physiology - Paris*, *104*(5), 272–278. doi:10.1016/j.jphysparis.2010.08.006. Retrieved January 28, 2015.
- Arro, G. (2013). Peeking into personality test answers: inter- and intraindividual variety in item interpretations. *Integrative Psychology and Behavioral Science*, *47*, 56–76. doi:10.1007/s12124-012-9216-9.
- Bourdieu, P. (1986). *Distinction: A social critique of the judgment of taste* (trans. Nice, R.). Oxon: Routledge.
- Bourdieu, P. (1993). *The field of cultural production* (trans. Du Verlie, C.). New York: Columbia University Press.
- Damasio, A. (2010). *The self comes to mind: Constructing the conscious brain*. New York: Vintage.
- Douven, I. (2011). Abduction. *Stanford encyclopedia of philosophy*. <http://plato.stanford.edu/entries/abduction/>. Retrieved on November 28, 2015.
- Feldman, L. (1995). Variations in the circumplex structure of mood. *Personality and Social Psychology Bulletin*, *21*(8), 806–817. doi:10.1177/0146167295218003.
- Freud, S. (1990). *Beyond the pleasure principle* (trans. Strachey, J.). New York: Norton. (Original work published in 1920).
- Gadamer, H. (1975, 2004). *Truth and method*. (trans. Weinsheimer, J., & Marshall, D. G.). New York: Bloomsbury Academic.
- Gazzaniga, M. (2011). *Who's in charge? Free will and the science of the brain*. New York: HarperCollins.
- Giordano, P. (2014). Personality as continuous stochastic process: what western personality theory can learn from classical confucianism. *Integrative Psychological and Behavioral Science*, *48*(2), 111–128. doi:10.1007/s12124-013-9250-2.

- Hochschild, A. (1979). Emotion work, feeling rules, and social structure. *American Journal of Sociology*, 85(3), 551–575. <http://0www.jstor.org.www.consuls.org/stable/2778583>.
- Kagan, J. (1997). *Galen's prophesy: Temperament in human nature*. Boulder: Westview Press.
- Kuhn, T. (1996). *The structure of scientific revolutions*. Chicago: University of Chicago Press. (Original work published in 1960).
- Kurzban, R., & Aktipis, C. A. (2007). Modularity and the social mind: are psychologists too self-ish? *Personality and Social Psychology*, 20(10), 1–19. doi:10.1177/1088868306294906.
- Laplanche, J. (1985). In J. Mehlman (Ed.), *Life and death in psychoanalysis*. Baltimore: Johns Hopkins University Press.
- Larocco, S. (2014). Ideology, affect, semiotics: on a non-personal theory of personality. *Integrative Psychological and Behavioral Science*, 48, 129–142. doi:10.1007/s12124-014-9260-8.
- Lipton, P. (1993). Is the best good enough? *Proceedings of the Aristotelian Society*, 93, 89–104. http://www.hps.cam.ac.uk/people/lipton/is_the_best.pdf. Retrieved on November 28, 2014.
- Lucy, J. (1996). *Language diversity and thought: A reformulation of the linguistic relativity hypothesis*. New York: Cambridge University Press.
- McCrae, R. (2001). Traits through time. *Psychological Inquiry*, 12(2), 85–87. <http://0www.jstor.org.www.consuls.org/stable/1449490>.
- McCrae, R. (2010). The place of the FFM in personality psychology. *Psychological Inquiry*, 21(1), 57–64. doi:10.1080/10478401003648773.
- McCrae, R., & John, O. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60(2), 175–215.
- Mead, G. H. (1956). *On social psychology: Selected papers*. Chicago: University of Chicago Press.
- Meyer, G., & Shack, J. (1989). Structural convergence of mood and personality: evidence for old and new directions. *Journal of Personality and Social Psychology*, 57(4), 691–706. Retrieved December 21, 2015.
- Personality Project. <http://www.personality-project.org>. Retrieved on November 24, 2015.
- Pinker, S. (1994). *The language instinct: How the mind creates language*. New York: Harper Perennial.
- Schweder, R., & Sullivan, M. A. (1990). The semiotic subject of cultural psychology. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 399–418). New York: Guilford Press.
- Toomela, A. (2010). Quantitative methods in inevitable and useless. *Frontiers in Psychology Psychology*. doi:10.3389/fpsyg.2010.00029.
- Uher, J. (2013). Personality psychology: lexical approaches, assessment methods, and trait concepts reveal only half of the story—Why it is time for a paradigm shift. *Integrative Psychological and Behavioral Science*, 47, 1–55. doi:10.1007/s12124-013-9230-6. Retrieved on December 10, 2014.
- Uher, J. (2015a). Conceiving “personality”: Psychologists’ challenges and basic fundamentals of the trans-disciplinary philosophy-of-science paradigm for research on individuals. *Integrative Psychological and Behavioral Science*, 49. doi:10.1007/s12124-014-9283-1. Retrieved on December 10, 2014.
- Uher, J. (2015b). Developing “personality” taxonomies: metatheoretical and methodological rationales underlying selection approaches, methods of data generation and reduction principles. *Integrative Psychological and Behavioral Science* 49. doi:10.1007/s12124-014-9281-4. Retrieved on December 10, 2014.
- Uher, J. (2015c). Interpreting “personality” taxonomies: why previous models cannot capture individual-specific experiencing, behavior, functioning and development. Major taxonomic tasks still lay ahead. *Integrative Psychological and Behavioral Science* 49. doi:10.1007/s12124-014-9281-3. Retrieved on December 10, 2014.
- Valsiner, J. (1999). I create you to control me: a glimpse into basic processes of semiotic mediation. *Human Development*, 42, 26–30. Retrieved on January 19, 2014.
- Valsiner, J. (2003). Sensuality and sense: cultural construction of the human nature. *Human Affairs*, 13(2), 151–162. Retrieved on February 5, 2014.
- Valsiner, J. (2006). The semiotic construction of solitude: processes of internalization and externalization. *Sign System Studies*, 34(1), 1–35. Retrieved December 10, 2014.
- Valsiner, J. (2012). Pathways to methodologies: Semiotics of knowledge construction. In *A guided science* (195–228). New Brunswick: Transaction Publishers.
- Vogl, J. (2014). *The specter of capital*. Stanford: Stanford University Press.

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