

# ***SOULFUL ALLIANCE:***

## **Sociology and Neuroscience as Inadvertent Colleagues**

Essay Review for York University STS 6201 - Professor A. Rutherford

W.I. Atkinson

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If you would converse with me, you must first define your terms.

- Plato (Socrates), *Symposium*

The paleopsychic processes embedded in the human central nervous system did not simply arrive a few thousand years ago; the drives and cognitions that have brought us this far have millions of years of selection and evolutionary pressure behind them . . . Dissect a brain and you will alter your perspective on the world and your place in it. If you open up a brain, the mind will, eventually, fall out.

- Michael R. Trimble

Andros shook his head. "Amazing. You even have emotions."  
- *No real mind without emotions, sir* [said the ship].

- William Illsey Atkinson, *The Fifth Evangelist*

ABSTRACT. After challenging STS's strange dislike of definitions, I analyze two books that at first glance may seem radically disparate: sociologist Nikolas Rose's *Governing the Soul* (1999) and neuroanatomist Michael Trimble's *The Soul in the Brain* (2007). My thesis is that despite initial appearances of incommensurability, Trimble hands Rose a bedrock theoretical-biomedical underpinning for the key concept Rose then discusses: the human soul. Thus for all their differences the books are complementary; what Rose assumes, Trimble convincingly constructs.

## I / MOVING TARGET: Defining the evolving soul

**F**rom its first emergence from older disciplines, in particular the history and philosophy of science, science and technology studies (STS) has steadily deconstructed the positivistic view -- likely held by most practicing scientists today -- that technoscience (1) is epistemically progressive, piling fact on fact; that external reality is not only knowable by humans, but is steadily better known; that while scientists may initially posit or hypothesize imaginaries, they ultimately reveal objective and pre-existent verity, rather than cobbling together consensus; that technoscience is a collegial democracy whose every voice is heard with attention and respect and in which politics has no place; and that time provides an adamantine vector that winnows away uncertainty and leaves behind incontrovertible truth. STS by contrast shows us a technoscience that is a quintessentially human enterprise: one marked by alliances and betrayals, rewarding folly as well as correcting it, and so thirsty for consensus that it constantly slips into groupthink -- "Sun it is not when we say it is not" (2).

Yet STS is still a young discipline, and often displays youth's self-conceit. There really *is* a reality exterior to the human mind, which while it may be ultimately unknowable on its own terms as the Kantian *νοούμενον*, still provides phenomena so consistent among observers (even when these observers are geographically, temporally, or culturally dispersed) that it may safely be construed as

(1) Adopting Bruno Latour's excellent term, which encapsulates the modern coextensivity of science and technology. While some technology has certainly been possible before the advent of systematic science (*e.g.* the tools, weaving, braiding, and weaponry of the Paleolithic, Neolithic, and Bronze Ages; everything in fact before the breakdown of the bicameral mind) this scenario seems increasingly unlikely. It is conversely demonstrable that little modern science could take place without complex infrastructural-experimental technologies such as sensor and data-processing devices.

(2) Shakespeare, W., *The Taming of the Shrew* IV.v

a *χόσμος*, "the world conceived as an ordered whole" (3). And while technoscience may indeed proceed by fits and indirections, *some* sort of ontological vector does seem to operate on it, so that technoscientific truth is the daughter of time. Each year humanity knows more; each year our technoscience grows more subtle and profound. From cleaner engines to more powerful telephones to more consistent data inscriptions (4) that shine light on the smallest flecks of energy-matter, it seems inarguable that *some* knowledge is demonstrably sound, accumulating, and technologically manifested in increasingly elegant ways. STS cannot deconstruct away all such advancement, however strongly its theoretical assaults. Fact exists, and so does progress.

Another aspect to STS's hubris lies in its cavalier treatment of definitions (5). The Socratic dictum cited by Plato on p.2 adjures the Academy to spell out *a priori* whatever it disputes. Yet STS largely disregards such advice. One might tolerate definitional fluidity, as long as some tentative and negotiable meaning were suggested for key terms at the outset of dialogue; but STS frequently spurns even this thin gruel. Entire STS seminars, whole books even, are routinely completed on the subject of technoscience without any attempt to state what it is we think we are talking about.

Still: *Soul!* The term is central to both Rose and Trimble; yet what a challenge to define (6). Webster's, presumably aiming at comprehensiveness, sounds like a saint beholding the Ineffable:

1. An entity conceived of as essence, substance, animating principle or actuating cause of life, or of the individual life, esp.[ecially] of individual life manifested in thinking, willing, and knowing . . . In many religions it is regarded as immortal and separable from the body at death. 2. The physical or spiritual principle in general, esp.[ecially] as informing the universe. 3. Man's moral and emotional nature, esp.[ecially] as manifested in or communicated by what he writes, composes, etc. 4. The seat of real life, vitality, or action. 5. The leader; moving spirit; also the embodiment. 6. Courage; spirit; fervor; spiritual force. 7. A person; as a kind *soul*. 8. A disembodied spirit . . . **Syn[onym]. Soul, spirit** as here compared, mean an immaterial entity distinguishable from and superior to the body. **Soul** is the preferred term when the connection with the body is in mind, or its functions, responsibilities, or special qualities are suggested; **spirit**, when an opposition to that which is material, corporeal, etc., is in mind, and its movement, activity, or the like, is suggested; as, to save one's *soul*; to life up one's *spirit* in prayer (7).

(3) Klein, Ernst, *Klein's Comprehensive Etymological Dictionary of the English Language*, I.359.i. For the centrality of phenomenological consistency to technoscience I am indebted to Professor James Wagner of Brock University (private communication [verbal discussion], St Catharines ON, 2013 November 22).

(4) Again the term is Latour's.

(5) Earlier this year I entered into a rather acerbic dialogue on this matter with the then graduate program director of York STS. Emails on request.

(6) I cannot resist adding the unoriginal observation that *ψυχολόγος* is itself the study of an undefined term.

(7) *Webster's New Collegiate Dictionary*, 12th Edition, p. 808ii

It seems evident that like St. Athanasius (8) Webster's painstaking attempt at precision paradoxically creates imprecision. Contrast I.P. Pavlov, who invoked his own discovery of operant conditioning among his staff by, in the words of one subordinate, "fining us real money -- kopecks! -- whenever he heard us say 'soul' or 'spirit' instead of 'higher neurological processes' " (the approved Pavlovian phraseology) (9). The late Canadian lexicographer Ernst Klein goes Pavlov one better: his entry for *soul* provides no definition at all (10). This is the Ineffable reduced not to text but to its absence. I shall come down midway between Klein and Webster, and propose the following as a working definition: '*Soul* comprises [I] All brain functions of which an individual is consciously aware, and [II] All non-conscious brain functions which support any member of function set I.

In the first function set I place rational thought, including comprehension of data obtained from immediate sensory input or memory; the comprehension of, and cogitation on, read text; and language output, whether oral or written. In sum, consciousness. In the second function set I place the formation and apprehension of intuitions; the initial neuroprocessing of sensory data, including recognition of oral speech and written text; associative memory; and the human brain's amazing abilities in prelinguistic processing, by which one may be constantly struck by the eloquence and authoritativeness of one's own utterance (Did I *say* that?). In sum, nonconsciousness.

Do not these two function sets add up to human totality? Is the brain not merely the seat of mind, spirit, and soul, but entirely coextensive with all these? Is this the trivial case ( $A = A$ )? Not quite. Maintenance functions such as physical balance, respiration, heartbeat, and each second's innumerable somatic biochemical reactions are undertaken not merely by the body beyond the brain (its life-support system and means of sensory data) but by portions of the brain itself; these functions I would exclude from a definition of soul (11). While all soul is somatic, not all soma leads to soul.

(8) *e.g.* 21 The Father is made of none, / not created, nor begotten.

22 The Son is of the Father alone; / not made, nor created, but begotten.

23 The Holy Ghost is of the Father and the Son; / not made, nor created, nor begotten, but proceeding . . .

(9) I have unfortunately been unable to trace the source of this quotation, which sticks in my mind from a reading some years ago. Pavlov in any case seems to have begged the question in his use of the key comparative adjectival form. It seems probable that if pressed, he would have defined 'higher' by reference to the very functions (mentation, cognition, memory, analysis, perhaps intuition) traditionally associated with the S-words.

(10) Klein, *op.cit.*, II.1477.ii. Klein appends a fascinating note: "These words [*soul, spirit*] prob.[ably] derive fr.[om] O[ld]Teut[onic] \**saiwaló*, 'that which is related to a lake or sea' . . . According to ancient Teutonic conceptions[,] lakes used to serve as dwelling places of the souls after death"

(11) Some scientists estimate, for example, that the human immune system may in aggregate be as complex as the brain. They also hypothesize that digestion involves a volume and subtlety of neurochemical activity (*e.g.* in peristalsis,

vomiting, excretion, or sampling and adjustment at fractional-second intervals of critical molecules such as hydrochloric acid) approaching that of the brain. We take all this for granted. Mark Twain: "To eat is human, to digest divine."

## II / TRIMBLE: From individual to collective

No doubt many will take me to task for really believing that the brain is *it* -- [if there be] no brain, [then there are] no sensations, no feelings, no movements, and no philosophy. Most neuroscientists take such a view . . . but many writers, especially those wedded to folk psychology, including many philosophers, are resistant to it (12).

Michael R. Trimble, M.D., F.R.C.P., F.R.C.Psych., is a Professor of Behavioural Neurology at the University of London, U.K. (13). The above excerpt from his Introduction immediately establishes his philosophical position on the soul: "the brain is it." Trimble further insults his opponents by dismissing them as "wedded to folk psychology."

Despite such conceit, it would be wrong to dismiss Trimble as one more positivistic, nonreflexive scientific professional who conflates himself with his work, and his work with Totality. Trimble seeks less to reify (and deify) mainstream technoscience than to use it to elucidate brain processes of vital importance to everyone. These processes include intuition, poetry, tragedy, music, and religion. They cross the border between the intensely personal and individual (their locus of origin) and the widest possible cultural collective -- a locus that is both the goal of each individual creator and a source of inspiration for further creation in others and herself (see Part IV below).

"My intention in this book" (Trimble writes in his introductory manifesto) "is not to please the too-focused academic (14) but to stimulate ideas" (15). In keeping with his *τέλος* of individual creativity, Rose sites the creative process (or more precisely, the set of interrelated processes involved in human creativity) in the staggeringly interconnected neural network of the human brain.

Unlike his more strident colleagues Trimble is no absolute neurolocationalist, siting (*e.g.*) all language processing in the left hemisphere, all emotion in the amygdala, or all memory in the hippocampus. His view is more nuanced and subtle; I would characterize it as neolocationalist (16). Soul, says Trimble, arises from the material form and spatiotemporal functioning of our brains. But neither the origins, nor the workings, nor the results of that creative process-set are simple. Never and nowhere are they continuously and precisely localized within the brain. For Rose there is no 'grandmother cell' (a single neuron, posited by absolute neurolocationalists, that alone among several hundred billion cerebral neighbours can pick out Granny). For Rose the brain is a cellular collective,

(12) Trimble 6. (Italics mine; hubris his)

(13) 'behavioral' as printed (by The Johns Hopkins University Press in Baltimore MD) but here adjusted to British-Canadian spelling as it must have occurred in Trimble's original MS.

(14) Ouch!

(15) Trimble 6

(16) My coinage

a set of co-operating individuals three hundred times more populous than China (17).

Trimble accepts in broad terms the late Julian Jaynes's proposal that consciousness is not only the first technology of the self, but is also of fairly recent construction. In Jaynes's view, the somatically modern humans who had appeared by 50,000 BCE were in no way conscious. They probably had languages (initially gestural, later spoken) of growing expressiveness; they certainly made weapons, co-operated to use them for war and hunting, and built artificial shelters. By c.7500 BCE they were even inventing farming, irrigation, writing, and cities. Yet despite these achievements, our ancestors were unreflexive. In the words of another prominent Jaynesian, the warriors portrayed in the *Iliad* were no more self-aware than their helmets (18). Kuijsten notes -

The problem over the definition of consciousness persists today, with many articles and books written on the topic . . . describing different things. For example, neurologists often use the term to define simply a waking, alert state, i.e., not being anesthetized, comatose, or knocked unconscious. For this Jaynes uses the more precise term "reactivity" (19).

Jaynes believed that everyone on Earth until roughly 1200 BCE, and everyone except a few people in the Mediterranean *οἰχομενέ* for a half-millennium after that, was reactive rather than conscious. Even today, Jaynes suggested, there may exist folk societies in which the prehistoric mind dominates. If it seems incredible that isolinguistic populations who were merely reactive could fight wars, raise pyramids and ziggurats, farm irrigated drylands, communicate in spoken language, and semiotically translate their tongue's spoken phonemes into visual representations, consider that most actions of most adults in most of the modern world, from playing a piano to driving a car to eating dinner, are largely or wholly unconscious. Even graduate students can chew gum and write an essay at the same time. The question arises: Absent reflexivity of their inner and outer worlds, lacking the cognitive abilities that we moderns use to invent, assess, and choose among a welter of alternatives, how did *HOMO NONDVM SAPIENS* steer a course through environments that were stable but not wholly predictable? Jaynes posits that holistic synopses of critical situations were synthesized in various loci of the preconscious right brain and sent to the left brain across the cerebral commissures, high-bandwidth bundles of several hundred million single-neuron fibres. They were thereupon perceived as auditory hallucinations: brief, unanswerable commandments from authorities absent, deceased, or even imagined. Prehistoric folk literally heard and obeyed the gods.

(17) Rose 31-32 and 176-203 *passim*

(18) Greer, S., in Kuijsten (ed.), 242. Trimble's enthusiastic adoption of Jaynes's theoretical tenets came as a surprise to me, who have been a Jaynesian after conducting a multi-hour one on one interview with Jaynes at a conference at McMaster University in 1983.

(19) Kuijsten 4

What first happened thirty-two centuries ago to destroy this ancient mode of unconscious cognition? Jaynes suggests a catastrophic geotectonic event, possibly the eruption of the Aegean volcano Thira (Thera). The remnants of this titanic explosion, which today form a small archipelago around Santorini, lie on the circumference of a huge extinct caldera six kilometres across. The vaporization of this enormous cone might have put fifteen cubic kilometres of detritus into the atmosphere and raised a tsunami that in the shallowly shelving harbours of the Ionian, Adriatic, and Tyrrhenian Seas might have measured a hundred metres trough to crest. In an hour, tens of thousands were killed and whole cultures were erased; a survivor must have felt the world had ended -- that his gods had deserted him. And so they had. The voices faded, stopped; the confident orders that had ordered static societies folded before an apocalypse equivalent to thermonuclear war. The human brain had to reconfigure itself or die, and luckily chose the former option. People woke up.

Adducing this (admittedly speculative) neurological prehistory, Trimble promotes the brain's right hemisphere above its present neurological characterization as the back-door originator of artistic emotion and unreliable intuition. Trimble sees a brain lobe that once housed gods as the site of today's poetry, music, and religious experience: a lobe that still has a great deal to say and do.

True, the left brain handles language; but not all language. Left-brain speech -- heard, spoken, written, and read -- follows rules. It strives to be prosaic, linear, unambiguous, logical: it is the last refuge of an academic. Right-brain language is the wild child. Having formed to channel Zeus and the Tetragrammaton, it remains awash in rhyme, metre, and metaphor. It is central to the hearing, playing, and composition of music; and to the writing and viewing of live theatre, especially tragedy.

Trimble notes, and laments, the extent to which our neurological comprehension of present and prehistorical brain function depends on a sad roll of individual aberrations. For the last three centuries, brain lesions caused by illness (epilepsy), trauma (accident), or congenital malformation (birth defects) have showed science how broken brains *don't* work. Based on these negative data, science has then made educated guesses about how a normal brain *might* work. Evidently this falls short of the ontological desideratum, *viz.* direct observation of a healthy normal brain.

Yet the news from Thira is not all bad. New noninvasive remote-sensing technologies are slowly prising up the corners of the brain's black box. True, the brain may never understand itself fully. Strong philosophical, cybernetic, and mathematical arguments hold that no closed system can self-model; *I* can never compass *me*. Despite the occasional problematic *τελός*, however, noninvasive scans using positron-emission tomography and functional magnetic resonance imaging

have revealed intracranial processes that do seem to buttress Trimble's and Jaynes's hypotheses. Scans of contemporary schizophrenics in the active grip of oral and oral-visual hallucinations show right-brain activity in a region exactly opposite to Broca's area, commonly thought of as the seat of prosaic language. A hundred milliseconds after the right-brain activity Broca's area lights up, presumably to process the right brain's incoming call (20). Similar right-to-left activity across the brain's commissures -- particularly the dominant great cerebral commissure, which contains some 200,000,000 neuronal links -- occurs when music or poetry are processed (heard, read, written, and/or spoken); and during the more mystical religious experiences (21).

Prose and poetry are distinct tongues, says Trimble. Linear (left-brain) language conveys data that are rigorous, literal, and prosaic. Poetic (right-brain) language uses rhyme, metre, and above all the deep ambiguity of metaphor to convey information that is wholly or partly emotional (Jaynes in fact posits that it was the right brain's development of metaphor that catalyzed consciousness). Left-brain language marshals signals in a strict and ordered way; right-brain language is a tangled bank of symbols. Each language has its own special power (22). This being said, I find it interesting that the concept of poetry as uniting both the soul's function sets should be perfectly caught by a T'ang critic of a millennium ago:

Poetry presents the thing in order to convey the feeling . . . If the poet presents directly feelings which overwhelm him, and keeps nothing back to linger as an aftertaste, he stirs us superficially; he cannot start the hands and feet involuntarily waving and tapping in time, far less strengthen morality and refine culture, set heaven and earth in motion and call up the spirits! (23)

Trimble may best advance our understanding of the soul by questioning the long-established Sapir-Whorf hypothesis that language determines brain structure: that as Harvard critic Sven Birkerts

(20) Trimble 61-63; also 236 note 29

(21) Trimble 22; also 146-7. By 'more mystical' Trimble means not quotidian prayer but the ecstatic visions that give those experiencing them the feeling of direct access to deity. Trimble certainly does *not* mean the writings of theologians, which are overwhelmingly linear-logical and read more like legal briefs than supernal encounters: God *must* do so-and-so, Man's left-brain decrees it.

(22) My own feeling as a long-time professional writer is that Trimble may be too categorical here. Good nonpoetic prose such as scientific or historical nonfiction is powerful and persuasive only insofar as it accesses both left-brain linearity *and* right-brain emotion. Even a legal brief may do this: Louis St-Laurent remarked that the law, properly conducted, may be one of the humanities. Felicitous phrasemaking is not limited to the skalds.

(23) Wei T'ai: translated by Graham, A.C., in *Poems of the Late T'ang* (Frontispiece: no page number). Cf. Thomas Stearns Eliot's 'objective correlative' in poetry, viz. rhythm.

maintains, language and consciousness are coextensive (24). To the contrary, says Trimble, "a distinction needs to be drawn between thought and language" (25). Thought happens first; language is the sabot that preserves and conveys it. There are no "direct meaning relations between words and things"; whatever the lobe that originates them, all words represent things not thoughts (26).

Among eminent neurologists, Trimble is surely one of the most literate: like Jaynes he moves easily beyond the technoscientific literature to remind us that there is more to education than a series of technical skills. Trimble's final quotation, from S. Faulkes's text *Human Tissue*, seems as strong a summary of Jaynes's theories as has been made, even by Jaynes himself:

And that is why all religion is about absence. Because once the gods *were* there. And that is why all poetry and music strike us with this awful longing for what once was ours -- because it [*sic*] begins in regions of the brain where once the gods made themselves heard (27).

So far the individual. Now let us examine to what *communal* uses a social scientist may apply the concept of the individual human soul.

### **III / ROSE: From collective to individual**

Nikolas Rose applies (if inadvertently) the individual soul that Trimble elucidates to explore key functions among the mass of individuals that we call society. Specifically, Rose examines 'the shaping of the private self' (his book's subtitle), which is to say the governing impact of the collective upon the individual. Rose's central question of *How is the self governed?* thus resolves into *How does the human collective influence the individuals it comprises?*

(24) Birkirts 29-40 *passim* ('The Poet in an Age of Distraction')

(25) Trimble 58f

(26) Trimble 59 (quoting Ogden and Richards)

(27) Quoted in Trimble (Endnote, no page number). I believe this explains the failure of all attempts to achieve machine intelligence solely via linear heuristic programming, and why that approach will continue to fail. Self-styled prophets such as Ray Kurzweil will never see a 'singularity' after which the world's machines wake up, unite, and become our overlords. *Cf.* introductory quotation from my speculative fiction, *q.v. supra*, p.2. Dream on, Ray!

Rose begins by accepting a central concept of 'government' as defined by Foucault: "the ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics, that allow the exercise of this very specific albeit complex form of power, which has as its target [a] population" (28). Rose looks at such government through several lenses: war, productivity, child development, self *ipse*, therapeutic technologies of autonomy (29), and instantiated 'freedom.'

To take one example: the applied governmental (top-down) psychology that arose in the Anglosphere during and after WWII sought with much success to imbue not only combatants but also civilian workers, housewives, and even children with a shared sense of purpose: what commanders would call morale (30). "Two themes run across . . . all (such methods)," writes Rose: "the need to systematically utilize the human factor and the psychology of the group" (31). Rose's diction is unclear: is his second theme group psychology *per se* or the need to utilize it? He may be trying to say that modern war has produced a kind of psychological circularity, *viz.* collective-to-individual followed by individual-to-collective *und so weiter*. To put the issue another way: Society engineers itself via its members. One sees cognate elements in the psychological testing of U.S. Army recruits during and immediately after WWI (32).

If war be the continuation of politics by other means (32a), then one might construe national productivity -- a ratio expressing a given country's monetized output divided by its workforce -- as a continuation of war. Both soldiers and workers must be motivated to win battles: the former in firefights, the latter in international commerce. In both arenas, the more motivated combatants prevail. Hence the power of applied psychology in shaping (governing) the individual soul (33).

Within a given nation, Rose sets out opposing subcultures of souls (34). Workers can sell

(28) Foucault, Michel, *On Governmentality* 20 (quoted Rose 5)

(29) Misprinted 'Technologies of Automation' in Rose 244-258 inclusive (headers, odd-numbered pages, cited text). This Freudian slip replaces *autonomy*, the soul's freedom, with *automation*, its mechanistic predetermination (!)

(30) Rose 15f. See especially the quotation of Watson (Rose 16), which is virtually an abstract for Rose's Ch.1. A common childhood occupation in the Anglosphere throughout WWII was to scour the streets for salvageable strategic materials such as scrap iron, aluminum, and paper: War stressed conservation decades before today's Green movements.

(31) Rose 17

(32) See Samelson, F., *Putting Psychology on the Map: Ideology and Intelligence Testing*. In Buss, A., ed., *Psychology in Social Context* 103-157 *passim*

(32a) von Clausewitz, K., *Von Kriege* (1833): 'War is not merely a political act, but also a political instrument . . . a carrying out of the same by other means.' Cited Bartlett 544b

(33) I temper Rose's point with a cynical saw: *When you've got 'em by the balls, their hearts and minds will follow*. This has been attributed to (among others) U.S. Army General Westmoreland, CINC Vietnam Mobile Command c.1968-71

(34)

nothing but their labour (a commodity resolvable, though Rose neither states nor seems to realize this, into *skills + experience + time*).

Rose's prototypical proletarian wants to do as little as possible, under conditions as pleasant as possible, for as high a wage as possible, with maximum job security. By contrast, capitalists and their administrative lackeys aim for maximum productivity. Mathematically, the productivity ratio rises as output value rises, and falls as worker population rises. In the limiting case, mechanization would be complete and a single worker would churn out all for all (35).

I would quarrel with Rose's dogmatic Marxist assertion that worker alienation is complete -- that people "work because they have to, they work at the behest of others in a process they do not control, to produce goods and services they do not enjoy" (36). Rose's constructed *golem*, a lumpenproletarian body without a soul, may describe some workers, but not all: Rose's universality seems a fiction imagined and projected by a doctrinaire ideologue. Yet as inductive logic demonstrates, the exception disproves the rule. Even in today's U.S. rust belt, contemporary surveys show that alienation is not complete: that millions of carpenters, machinists, game designers, academics, statisticians, and service providers continue to disregard Marx and delight in their work. A sizeable percentage would even work for nothing. Rose elsewhere contradicts his own initial contentions by noting that psychological factors such as achievement and personal growth can motivate workers (37). If these factors align they fulfil the worker's soul both irrationally and rationally, making him or her "feel like a winner" (38). Here perhaps Marx dons California denim: conceptually, the Victorian idea of surplus population (too many people for the jobs) has given way to unemployment (too few jobs for the people) (39).

Rose's treatment of the psychogovernmental collective as it applies to child development and family life is less doctrinaire. For Rose the vehicle by which the greater society shapes the child into a normative adult is the parental dyad (40). The First World collectively identifies its future viability

(35) 'In the future every factory will have only two employees, a human and a dog. The human's job will be to care for the dog. The dog's job will be to keep the human from touching the machinery' (*Anonymous*)

(36) Rose 55

(37) Rose 111ff

(38) Rose 115-119. It is interesting that Rose adduces here what one might call pop locationalism, siting depersonalized management in the left brain and worker-as-winner in the right brain.

(39) I am indebted to C.S. Lewis for this observation, which he accurately calls "a great advance in charity." Dickens's Ebenezer Scrooge uses the term 'surplus population' before his soul is redeemed in *A Christmas Carol*.

(40) Implied by Rose to be heterosexual, though Rose's conceptual approach could be applied with little modification to gay parental couples.

with that of its young, and to this end marshals both negative (mostly legal) and positive (mostly financial) incentives. Citizenship privileges -- short of voting, driving, gun ownership and the like -- have been extended to minors, granting them a nearly total range of human rights. Rose notes that at least in the First World, the developing (child) soul has been accorded strong jurisprudential protections that include innate allowance for extenuating circumstances; a reduction in presumed or attributable responsibility; and a concomitant reduction in severity of legal judgments. As an historical comparison, in 18th-century London children as young as six were routinely imprisoned and even executed; there are documented cases of Tyburn hangmen 'mercifully' suspending themselves from small boys' ankles to hasten death by strangulation (41). Such horrific cases would be unthinkable today. Nowadays persons under age ten cannot be held criminally accountable, and special courts try juveniles from ages ten to majority. Such courts must consider such factors as socioeconomic status (*e.g.* poverty) and family pressures (*e.g.* absence of a parent, home violence, home substance abuse). Incarceration of juveniles is a last resort, and even now is intended less for punishment than for reform (42).

As the collective increasingly makes allowance for social disadvantages impacting on the souls of individual citizen-children, it also moves to alleviate their disadvantages at source. Malnutrition is addressed by food banks and food stamps; susceptibility to illness by public health nurses and vaccination; family violence by social workers empowered under federal, state, and provincial laws to move at-risk children from dysfunctional households into kinder foster care.

Another pressure on the child-soul that the collective identified and moved to remedy was inadequate education. In the USA especially, this was exacerbated by 'white flight': the movement of the employed (mostly Caucasian) to suburbia, abandoning urban cores to the black (mostly poor) and to the poor (mostly black). Public schools in the hollowed-out American cities endured so high (or rather low) a degree of broken equipment and staff turnover that both dropouts and graduates faced long-term socioeconomic disadvantage: in a vicious circle, each new cohort of ill-educated children emerged to face a world of subsistence work or unemployment. Working or not, the poor stayed poor, collapsing inner-city tax bases and perpetuating urban poverty.

(41) Hibbert *passim*. It is a harrowing read.

(42) Reform is at least the theoretical intent. In practice, both juvenile 'reformatories' and adult 'penitentiaries' expose new inmates to more hardened ones and prove efficient training grounds for turning the former into the latter.

Accordingly the collective, beginning in the U.S. in the mid-1960s, sought to better educate its poorest child-citizens in the hope that better learning would lead to better earning, thus repaying higher education costs via higher tax revenues. Redrawn school catchments and long-route busing gave poor children access to suburban schools that were clean, well staffed, well financed, and largely white. While beneficial to some inner-city students, this liberal intervention was not fully accepted in suburbia even in 1989, when *Governing the Soul* first appeared. A quarter of a century later, the law of unintended consequences still holds (43).

Rose concludes with a look at psychotherapeutics, first introducing and then dismissing the "melancholy, aristocratic sarcasm" (44) exhibited by the sharper critics of psychotherapeutics such as Colin Gordon and Pierre Bourdieu. Rose maintains that psychotherapeutics have a legitimate role: to engineer the modern soul into self-governance. Bourdieu *et alia* (so Rose) are too cynical in characterizing psychotherapeutics as anodynes that let slothful consumers endlessly gobble resources, while laying that flattering unction to their souls (45) that they thereby achieve a liberating self-actualization. Yet here too I find Rose unconvincing. Bourdieu's assertions seem to me more persuasive, *e.g.* that psychotherapists "are moral entrepreneurs, appealing to the mystique of sciences to give the appearance of an objective foundation to ethical presumptions that are both arbitrary and . . . that . . . legitimate their claims to increased social power" (46).

#### **IV / SOULFUL ALLIANCE: Rose and Trimble co-assessed**

Despite these cavils, Rose's societal (group) soul displays no dissonance to Trimble's individual soul, provided one accept that both soul and mind proceed from a normal brain that processes simultaneously, and (at least relatively) even-handedly, a vast variety of inputs from various internal and external sources. The soul-construct that Rose and Trimble share is both Rose's (malleable and susceptible to collective forces) and Trimble's (synthesizing data from within and without). This individual soul-construct returns to the collective the products of its thought, *viz.* the single-artist embodiment of the *zeitgeist* called creative genius.

(43) Consider another intervention aimed at giving poor children a head start: the TV program *Sesame Street* filled U.S. classrooms with well rested, well fed, well dressed white children who were now more competitive than ever. This has been termed the Matthew Effect, from KJV Matthew 25:29: *Unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath.*

(44) Rose 261 (quoting Gordon)

(45) Shakespeare, W., *Hamlet* III.iv  
(46) Rose

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(synopsizing

Bourdieu)

A final note. Rose repeatedly compromises his academic objectivity by straying into an anachronistic streets-of-Glasgow Marxism. His thinly veiled outrage reifies (and in fact constructs) a 'worker' who (or rather *that*) is simply reactive, condemned to perform repetitive and meaningless work under the lash of financial necessity. This may seem at odds with Trimble's soul-construct, which integrates all brain functions: intellectual, emotional, creative, poetic, and religious. Yet if we correctly perceive Rose's approach as a doctrinaire oversimplification, the problem resolves itself. It is neither worker nor Trimble whose soul seems in flight from full consciousness: it is that of Rose. Sociologist, heal thyself.

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