The Paradox of Grant Allen's Physiological Reductionism

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❖ ABSTRACT

One of central issues in the Literature and Science discourses during the Victorian era is the relation of physiology to psychology. Many thinkers tackle the question of whether or not psychic phenomena can be reducible to their physiological bases. For instance, Victorian physiologist William Benjamin Carpenter claims that there should be a boundary between physiological and psychological qualities. Yet, his contemporary writer Grant Allen contends for the reduction of psychology into physiology.

In the essay, I discuss Grant Allen's work *Physiological Aesthetics* (1877) so as to eventually problematize his physiological reductionism. I especially highlight the paradox of his physiological aesthetics. In order to clarify my argument, I introduce two concepts: evolutionary aesthetics and physiological reductionism. On the one hand, Allen argues for the development of aesthetic appreciation. The gradual evolution from gaudy to serene colors, for instance, reflects the fine differentiation of sensory organs. He believes that the existence of varied aesthetic pleasures corresponds to the evolution of sensory nerve structures. Nonetheless, Allen ironically gives more weight to the commonality of aesthetic experiences than to this teleological ordering of aesthetic experiences. He argues that there is no fundamental difference among humans in terms of their aesthetic assessments. Furthermore, there is even no essential distinction among plants, animals, and humans in light of their aesthetic appraisals, he states firmly. Although he asserts the gradual advance of aesthetic feelings caused by the intricacy of nervous systems, he simultaneously trivializes the evolution of aesthetic appraisal. In the essay, I highlight this paradox in Allen's physiological aesthetics.

It should be underscored, lamentably enough, that Allen seeks biological purity by erasing fine lines among physiology, psychology, and sociality. He estranges aesthetic experiences from subjective variations and their socio-cultural contexts. He makes great efforts to eliminate individual differences and socio-cultural specificities in order to extremely biologize aesthetic experiences. Hence, Allen's physiological aesthetics is marked as the politics of physiological purification.

Key Words

physiological reductionism, Grant Allen, psychophysiology, biological purity, aesthetic disinterest

I. Introduction

Psychophysiology aimed at addressing the relation of physiology to psychology during the Victorian era is one of crucial fields of study in Literature and Science studies. The presence of many variations for it, to name a few, "psychopathology," "psychotherapy," "psychoneurology," "neuropsychology," "neuroanatomy," "neurophysiology," and "psychophysics," indicates that it lies at the core of heated debate (Rylance 14; Albright et al 263-66). As science extends from natural sciences (i.e., physics and chemistry) to life sciences (i.e., phrenology, physiology etc.) to mental sciences (i.e., psychology, psychiatry, psychoanalysis etc.), the question of whether or not psychophysiology biologizes mind is integral to relate humanities to science. Psychophysiology wavers between the physiologization of psychology and the psychologization of physiology.

What is at issue in psychophysiology is to determine if the psychological can be reduced to the physiological. Although the physiologization of psychology (i.e., cerebral localization), was vogue as the times turn to the latter part of the nineteenth century (Stiles 676),[1] the linkage of

1) Anne Stiles argues that even twentieth century literary research directs its attention to materialistic reductionism (676-77). It does not mean that the discord between physiology and psychology has disappeared. Taking neural science for an example, its practitioners acknowledge the distinction of lower

psychology to physiology was persistently debatable in the Victorian times. Many contemporary writers participate in this Victorian version of body-mind nexus. Not embracing the autonomy of mental activities, materialistic reductionists claim that "psychiatry and psychology will eventually be reduced to biology (which might be construed as physiology or evolutionary biology), biology to chemistry, and chemistry to physics" (Thornton 192). In his essay on "Body and Mind," William Kingdon Clifford (1845-1879) holds that "mind is the reality or substance of that which appears to us brain-action" (qtd. in R. Smith 90-91), negating an independent agent of self. Alexander Bain (1818 – 1903), co-founder of *Mind*, the first journal dealing with psychophysiology in Victorian Britain, argues that there is no rudimentary difference between higher and lower faculties of the mind (Rylance 173).

Yet, there were determined challengers to these physiological reductionists during the entire Victorian era. In an article "Cerebral Psychology: Bain" (1860), James Martineau (1805-1900) remarks that "Mental Science is Self-Knowledge: Natural Science, the knowledge of

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and higher functions of mind. In "Neural Science: A Century of Progress and the Mysteries That Remain," Thomas Albright et al argues that there are two approaches in neural science that attempts to articulate the psychophysiological mechanism of subjective experiences: reductionist and holistic perspectives. While the former suggests the cellular, synaptic, genetic sources of stimuli, the latter gives attention to selective, abstracting, and restructuring process of it (203-05; 297). Precisely, while the theory of "elementalism" highlights sensational information where perception is a collection of independent stimuli triggered by single cells, the theory of Gestalt underlines the holistic approaches valuing the "contextual interaction" (283) whereby visual sensation is abstracted, hierarchized, and edited for "depth vision" (271). According to the Gestalt standpoint, outer stimuli undergo "an information-processing hierarchy" from "sensation" throughout "perception" and "learning and memory" to "decision-making" (263). An organism has an inner, self-regulative control of the exteriority of sensation. In *Perception and Communication* (1958), Donald Broadbent describes this psychic power as "selective attention," "a filter that holds back messages from unattended channels" (298), or "selection among conflicting inputs" (309). In this manner, a controversy over the issue of how to couple physiology with psychology has been continuing even until the twentieth century.

something other than Self. These spheres are of necessity mutually exclusive" (qtd. in R. Smith 88). He concludes, "we find ourselves entangled continually in mere quasi-psychology, which does not in the least speak to any within" (qtd. in R. Smith 88). Frances Power Cobbe also problematizes the physiological reduction of human psychology. In her writing "Unconscious Cerebration," Cobbe maintains that there are two kinds of mind: unconscious and conscious, arguing for the certain presence of soul/spirit (R. Smith 94). Tim Thornton affirms that confronting the conflict of physiology and psychology, psychiatry does not reject one for the other so as to "straddle[s] this divide" (203). It should be stressed that in order to criticize those who understand mind as a collection of sensory experiences, supporters of psychic autonomy come up with a qualitative distinction of higher faculties ("reason, faith, love, spiritual apprehension" and self-reflection etc.) and lower faculties ("sensation, feeling, appetite, desire" etc) (Rylance 27). For instance, they counter English philosopher David Hartley's theory of mental association that "all love and hatred, all desire and aversion" are "generated by association, i.e. mechanically" (qtd. in Rylance 85). Contenders of inner hierarchy of the mind strive to go against the levelling of higher and lower faculties. In other words, those who believe in the autonomy of the mind strongly disagree with whoever suggests that physiology and psychology are interchangeable with each other.

In this essay, I question physiological reductionism through the close reading of Grant Allen's work *Physiological Aesthetics* (1877), so as to ultimately contend for the inter-penetration of the physiological, the psychological, and the socio-cultural. Allen places stress on the physiological reduction of aesthetic pleasures. In the preface to *Physiological Aesthetics,* he states that his goal is to articulate what Herbert Spencer calls "aestho-physiology"; his work aims to "exhibit the Aesthetic Feelings as constant subjective counterparts of certain definite nervous states" without relying on "transcendental rhetoric" and "poetical declamations."[2] He emphatically claims that even aesthetic emotions "are the same in kind

2) Grant Allen, *Physiological Aesthetics* (London: Henry S. King, 1877) viii. Hereafter citations come from this edition.

as those which characterize all other pleasures or pains, as the case may be, whose bodily nature is more readily recognizable"; in other words, "all mental phenomena are the subjective sides of what are objectively cognised as nervous functions" (2). Allen's aesthetics is "Physiological Psychology" as part of "mental science" addressing "a physiological law of pleasure and pain" whereby he seeks "an intermediate link between the bodily senses and the higher emotions" (2).

Regrettably enough, however, Allen's physiological aesthetics is problematic, since he ignores psychic as well as social contexts. In Section II, I problematize Allen's prioritization of physiological reductionism over evolutionary aesthetics. Although many critics focus on his evolutionary aesthetics,[3] I bring his physiological reductionism to the fore. Evolutionary aesthetics holds that the gradual evolution of aesthetic experiences is the subjective version of an increasing complexity of nervous systems. Physiological reductionism, on the other hand, values the physiological generalization of different aesthetic experiences. I demonstrate that although Allen oscillates between the hierarchy of aesthetic feelings and their homogenization, he ultimately eschews the former in favor of the latter. I will portray this contradiction as the paradox of Allen's physiological aesthetics. In Section III, I assert the over-determination of the physiological, the psychological and the social. I will counter Allen's physiological reductionism by highlighting the inter-penetration of the physiological, the psychological, and the social. I will eventually examine that Allen physiological reductionism implicates the politics of aesthetic purity in that it isolates itself from personal diversity and socio-cultural contexts.

II. Evolutionary Aesthetics and Physiological Reductionism

In his work *The Colours of Flowers*, Allen comments on the evolution of color as follows:

3) In his essay "Grant Allen, Physiological Aesthetics, and the Dissemination of Darwin's Botany," for instance, Jonathan Smith explores the relation of Allen's physiological aesthetics to Darwinism. Refer especially to pp. 285-95.

> All flowers, it would seem, were in their earliest form yellow; then some of them became white; after that, a few of them grew to be red or purple; and finally, a comparatively small number acquired various shades of lilac, mauve, violet, or blue. So that if this principle be true, such a flower as the harebell will represent one of the most highly developed lines of descent; and its ancestors will have passed successively through all the intermediate stages. (21)

Allen argues that color evolves from yellow through white to red or purple to blue. It should be stressed that he naturalizes the abatement of ostentatious colors as the development of colorization. To support his argument, he takes for example not only harebell but malcolmia; "the common Virginia stock of our gardens (Malcolmia) often opens of a pale yellowish green, then becomes faintly pink; afterward deepens into bright red; and fades away at the last into mauve or blue" (*Colours* 22). "Subdued," "pale," or "neutral" colors are aesthetically preferred to "brilliant" or "garish" light for "dinner-parties, balls, and other festive occasions" as well (149, 159).[4] Allen designates this neutralization of color as a progressive law of it.

The paradox of Allen's aesthetics is that despite his contention for aesthetic teleology he ultimately takes it under physiological generality. Notwithstanding his argument for the gradual advance of aesthetic perception, his observation leans ultimately toward the physiological homogeneity of aesthetic experiences. While he asserts stages, phases, or levels of aesthetic experiences, he quickly downgrades them for the physiological universality of them. The fact that people have common nervous systems is more significant than the fact that they have developed their own aesthetic perception. I refer to this generalization of aesthetic appraisal as physiological universalism. Even though Allen prefers "water-colour by David Cox" to "Egyptian painting staring in red, green, yellow," he eventually identifies his own personal hierarchization of

4) General laws of taste, according to Allen, is antithetical to the softening of colorization. As one gets older, he tends to want pungent condiments shifting from mustard to radish to curries to red pepper (65).

aesthetic judgment as a matter of no significance; "minor variations in Esthetic Feeling" result from "minor varieties" of nervous structures (45). He laments that one of serious problems with previous debates on aesthetics is to glorify higher aesthetic appreciations (i.e., "the finest-nurtured," "most discriminative," "the purest," or "most cultivated" tastes). He instead places distinctive value on the common sensibility of an individual. According to him, the aesthetic appraisal of an "average human being" is more crucial than that of "a Raphael, a Mozart, or a Milton" (46). On the one hand, he claims that aesthetic pleasure originates from a higher version of nervous systems; "higher coordinating neural centres" or "a higher class of nervous structures," which Allen labels as "the organs of the Intellect," create a higher standing of aesthetic pleasure by exerting their discriminating functions (174, 186). On the other hand, however, he suddenly places more weight on the physiological universality than on this evolutionism. He underscores that all living beings are capable of enjoying their sensuous pleasures since they have "simpler and commoner feelings" irrespective of whether or not they are plant, animals, and human beings ("Dissecting" 74). He designates this existence of universal aesthetic experience as "the community of feeling" (48). Allen notes that an average person has common neural systems for aesthetic assessment. He even maintains that there is no rudimentary difference between plants, animals, and humans with reference to their pursuit of aesthetic pleasures. "[T]he plumage of the argus pheasant, the peacock, or the bird of paradise, and the brilliant hues of the baboon" is fundamentally similar to "the cherry lips, rosy cheeks, blue eyes, and golden hair of our Aryan maidens" in keeping with their sexual selection for "bright colouring," he writes (156). Here we see a radical version of physiological reductionism.

The paradox of physiological reductionism in Allen's aesthetics reaches its peak in his notion of aesthetic disinterest. He defines the highest version of aesthetic pleasure as aesthetic disinterest. The "Maximum of Stimulation with the Minimum of Fatigue or Waste" ought to be unaffected by physiological needs, he remarks (39). This standpoint is totally in conflict with his biologization of aesthetic experiences. As a means to clarifying

his argument, it is necessary to first of all explain Allen's view of work and leisure. While the former seeks "vital" or "life-serving functions" (30, 31), the latter points to "purposeless activity" for its own "immediate end," he states (33). Aesthetic experiences are involved in the "standard of disinterestedness" of leisure activities (83).[5] Allen insists that if aesthetic experiences stem from vital bodily functions such as eating foods or bringing forth offsprings, they do not incite "disinterested pleasures" (92). A pursuit of food, housing or his anticipation of getting a job after graduating from college does not produce aesthetic feeling; likewise having beef, bacon, beer, or gin is not aesthetic as well (206-207). For, all of these examples are life-serving in the sense of preserving life. Sooth jellies' sweetness, however, is aesthetic owing to pleasing your palate without the purpose of maintaining life. Softness, if linked to sexual desire, is not aesthetic, but "the purely disinterested pleasures and pains of smoothness and roughness" are aesthetic (92). While wine is poetical, rum is unpoetical; for, the former is glorified by Bacchus, whereas the latter is contaminated by "slave labor or degraded negro cultivators" (269). As a sculptor shows "self-abnegation" or "unusual purity" in terms of his effort to be unmixed up with "gaudy" colors, his pursuit of pure form maximizes aesthetic pleasure (234-35). As a statue offers "mere form" without relying on gaudy colors, this "self-abnegation" in the sense of not displaying eye-catching impulse for practical interests is a higher form of aesthetic taste (235). Allen identifies not only food cravings but also sexual desires as catering to human lower desires. The point is that the more aesthetic feelings are far away from natural urges, the more they take a higher level of aesthetic experience. Allen's definition of aesthetic pleasure as being devoid of physiological needs clashes with his pursuit of the bodily origin of aesthetic experiences.

5) Allen shows that even though play and aesthetic pleasure are overlapped with each other, it does not mean that they are identical with each other. For example, if one participates in physical exercise for its own end, but not for life-serving purpose, this activity is play. On the other hand, if one enjoys visual or tactile pleasures, this passive exertion is aesthetic pleasure. Otherwise stated, exercising his limbs and muscles is play, whereas exercising his eyes and ears is relevant to aesthetic pleasure. Refer to pp.33-37.

To summarize, Allen's aesthetics is paradoxical in two ways. One is to put physiological reductionism before evolutionary aesthetics; the other is that his concept of aesthetic disinterest as the highest version of aesthetic pleasure is the complete opposite of physiological origination. In spite of his concern with teleological evolutionism, he is ironically eager to nullify developmental stages of cerebral-spinal nervous organizations. He gives more priority to the commonality of aesthetic experiences than to teleological evolution of aesthetic appraisal. His valuation of the physiological universality of different aesthetic experiences leads to the paradox of his aesthetics. Equally important, Allen's notion of aesthetic disinterest maximizes the paradox of his physiological reductionism. If far away from materialistic goals or bodily gratifications, aesthetic disinterest becomes the highest form of aesthetic experience. The more aesthetic feelings are immune from sensuality, physicality, and biologicality, the more one enjoys a higher level of aesthetic pleasure. In spite of the fact that he prioritizes aesthetic disinterest over life-serving activities, however, Allen eventually marks out its physiological foundations as his prime concern. That is to say, in disregard of the division between life-serving pleasures as lower senses and aesthetic feelings as higher senses, he concludes that the universal operations of cerebral-neural organizations are the first priority.

III. Physiological Reductionism and the Politics of Biological Purity

Allen's aesthetics aims to demolish the boundaries of the psychological, the socio-cultural, and the physiological, so as to argue for physiological reductionism. Underlining "common tastes," "he strives to eliminate individual, social, and biological differences; they are "minor variations," "slight variations," or even "abnormal cases" (45). Of course, he admits with hesitation that the variety of nervous structure causes individual variations of aesthetic response. Neural systems vary according to whether

one is deaf/blind or not. A child is not happy with stimulating condiments while an adult is. A chronically sickly person cannot tolerate creaking doors (42-44). However, he trivializes these differences in aesthetic assessment to assert physiological reductionism.

The purpose of this section is to tackle Allen's physiological absolutism by valuing the over-determination of the physiological, the psychological, and the socio-cultural in aesthetic appraisal. I approach Allen's physiological reductionism in two aspects. First, I discuss it by linking the physiological to the socio-cultural; then, I deal with it by connecting the physiological with the psychological. Allen states that tedious sounds are more difficult to endure for "musically cultivated" persons than for "the less discriminative nervous centres of the utterly untutored ear" (44). Aesthetic evaluation is proportional to "practice and attention" (115), whose results vary according to cultual differences and educational efforts. Meters like iambics for being "slow and solemn", dactyls for being "graceful and rapid," and trochees for being "stirring and suitable for martial pieces" (117) can be definitely developed by "trained attention" (119). Culturally refined people are well versed in "delicate combinations of complementaries" or "neutral tints" in colorization while vulgar people prefer "the glare of primary hues" such as red, orange, and purple (44).

However, Allen belittles these socio-cultural variations for biological foundations of aesthetic perception without sufficient accounts. He values "normal and usual" sensory capabilities of an average individual by marginalizing "abnormal and unusual" ones .The more educational, cultural, and political elements are eliminated, the higher aesthetic values become. Speaking in light of poetic diction, Allen proclaims that poetic language should erase political contexts in order to take on disinterested purity. He takes for example the statement "slavery" "'stank in his nostril'" in poetic writing; although the sentence itself contains intellectual disapproval of slavery, Allen judges it as being unpoetical. Just as poetic language excludes adjectives relevant to harsh sounds (i.e., "rough," "coarse") and pungent smells (i.e., "stinking") to select sweet words, so it ought to avoid political words such as "slavery" and "stank," as much as words pertinent

to life-serving activities (i.e., digestion) (252, 253). Therefore, Allen's notion of aesthetic purity accompanies an ideologically filtering process by purging itself of political contexts.

In order to grasp Allen's fastidious faith in physiological aesthetics more obviously, it is instructive to compare Allen with George Henry Lewes. Unlike Allen, Lewes divides human nature into two: "animal organism" and "social organism" (101). He casts a human being as a social organism due to his social experiences. For instance,

> . . . not only will it be shown that many thousands of years passed before even man was able to perceive the colour blue, for instance, (though of course he felt a difference between a blue object and a brown one) it will be shown that no animal can possibly perceive blue as we perceive it and the reason in both cases is not to be sought in physiological processes of Vision, but in psychological processes of Thought. The possibility of this perception is due to Language; and Language exists only as a social function. (115)[6]

The passage above shows that Lewes distinguishes between men and animals in terms of apprehending blue color. Animals' perception of blue differs from men's since "social medium" (114) such as "language" intervenes with a distinction between colors. Not only language but also social factors such as "tools and Instruments," "Creeds and Institutions," and "Literature, Art, and Science" (115) influence the observation of nature. Lewes discerns a difference between physiological and socio-cultural elements in viewing colors. Just as Lewes pinpoints the tension between the physical-chemical and the biological, he notes the distinction between the physiological and the social. The physical is "characteristic of motions of *propulsion*, with the chemical involving "motions of *combination*" among atoms and molecules; the biological pursues "motions of *evolution*" [italics in the

6) The editors of *Embodied Selves: An Anthology of Psychological Texts 1830-1890*, Jenny Bourne Taylor and Sally Shuttleworth introduce this quote. See p.90. This work provides a collection of excerpts from Victorian writings about mental sciences.

original] (104). Likewise, he tells between the biological and the social through an example of men and animals' perception of color.

Allen, however, dismantles the line between the physiological and the social in order to uphold his own physiological absolutism. On the one hand, he acknowledges that social-educational aspects affect aesthetic appraisal. For example, "coarse and uneducated nerves cannot observe the unpleasantness of rough voices and harsh laughter," whereas "only a very attentive and highly cultivated ear can thoroughly appreciate the delicate modulation" (113). On the other hand, though, Allen proclaims that social factors are just minor variations. Precisely, the social process of education can promote mental capabilities, what Allen portrays as "internal action" called "thought" (200). It follows that "the intellectual faculty of attention" turns into "trained attention" (113, 119). That is to say, attention, if trained systematically, unfolds "reflex action," or "volitional activity, which is not immediately exposed to senses but "mediately suggested by means of the intellect" (196-97). It enables external sense-stimulants to rise to the surface of consciousness. Allen admits that a social discipline of education advances this self-reflexive intellectual power. However then, Allen resolutely marginalizes it to assert the importance of physiological factors. Education merely serves as "*educ[ing]* the existing faculties, not to *produce* new ones" so that it cannot lead an individual to go "beyond the limit which his cerebral structure lays upon his intelligence" [italics in the original] (50). For the "delicacy of nervous constitution" (119) is more significant than this social context. Allen harbors the idea that conscious activity called attention is a high level of mental activity. Social-cultural-educational training programs can improve attentional abilities. Yet, he suddenly replaces this socio-cultural character of attention with their bodily foundations; it is caused by "higher co-ordinating" nervous functions (200). Allen eradicates social factors as something impure in poetic writing. He hesitates to admit frankly that the physiological and the social are overlapped with each other. Instead, he takes advantage of physiology as a kind of dues ex marchina. Just as it implies an insufficient solution for the conflict of a plotline, so Allen's

easygoing reference to physiology worsens the contradiction of his aesthetics.

In the relation of psychology to physiology, too, Allen as a physiological reductionist does not concede the independence of mental qualities. Maintaining that mental activities are the effects of a higher level of nervous functions, he does not accept the autonomy of psychic life. If compared with contemporary Victorian physiologist William Benjamin Carpenter's, his standpoint is more remarkably brought to light. Carpenter distinguishes between mental instincts and voluntary will. Resulting from the workings of cerebral-nervous-muscular systems, mental instinct is characterized by involuntary automatic operations. On the other hand, voluntary will aims to regulate human consciousness through "purposive selection," "purposive determinations" or "intentional direction" (25, 379, 414). Unlike mental instinct, speaking briefly, the will exerts voluntary, self-directed, self-determining mental powers. This type of mental quality directs physiological operations to its planned purpose. For instance, muscles involved in breathing is automatic and involuntary, but if they are controlled for speech it is interrupted by the voluntary functioning of the will (16-17; 379). The degree of self-control, self-direction, and self-determination is a decisive criterion through which volitional activities of the will stand apart from involuntary automatic activities.

Pointedly, Carpenter does not insist that the psychological is completely reducible to the physiological; instead, they are relatively free from each other. If I borrow Louis Althusser's terms, physiology and psychology seek "relative autonomy" on an equal status. In order to struggle against economic determinism, Althusser argues that four social factors---economic, political, ideological, and theoretical—should not be replaced with their economic motivations (Scott and Marshall 558-59). In a similar fashion, psychological motives cannot be completely subject to their physiological determinants. Instead of psychology being totally subject to, or conversely, estranged from physiology, they are interdependent. Although voluntary will could be "habitual or secondarily automatic" with the stoppage of train and effort (21), it, Carpenter contends, has its own self-regulatory

abilities. He claims that an individual can direct his physiological functions into his own specific goals thanks to the workings of conscious will and then, if necessary, can redirect them into even the highest version of moral sense, what he calls "common consciousness of Mankind" (406). He protests that in order for a human being not to lapse into "Thinking Automania" with the consequence of being a slave to "habit and impulse," he should improve self-determining abilities of the will through disciplinary training (27).

Allen, however, persistently endeavors to biologize psychological factors. A particular type of physical sound creates a corresponding physiological stimulation and in turn triggers its resultant psychic vibration. Transmitted by air-waves, violin strings are more aesthetically thrilling than tuning-forks since the intricate air-waves of violin strings lead to activating diverse auditory nerve systems (124). The physical sets off the physiological first and then generates the psychological. For Allen, the physical and the physiological are preferred to the psychological.

More problematically, Allen contends that there is no distinction between higher and lower mental functions. For him, the gradual complexity of nervous systems causes the hierarchy of mental qualities. Even though intellectual/mental pleasures are aesthetically superior to bodily, emotional, sensuous pleasures, they are the functions of higher nervous systems. The primacy of intellectual/mental over emotional/sensuous/bodily qualities is trivialized. Although differing from "peripheral end-organs of nerves," a more sophisticated level of thinking called "intellect" is just "a higher class of nervous structure," acting as "correlat[ing] and co-ordinat[ing]" external stimuli (186). Intellectual qualities are no more than a higher coordinating process of nerves. Allen is a strong supporter of this physical-physiological reductionism.

Here we see a stark difference between Carpenter's and Allen's viewpoints. Carpenter claims relative autonomy among the physiological, the psychological and the social. That is to say, he explores how psychology depends on physiology and is simultaneously independent from it. Carpenter details the similarity and dissimilarity between psychology and hard science

(physics, chemistry, and physiology). He proclaims that, for instance, "Laws of Thought" are similar to "Laws of Matter in the sense that both of them are "fixed and determinate" (15); similar to physical phenomena, mental activities also have their own systematic rules. But he also stresses the difference between physiological and psychological activities since the former is a mechanically automatic activity and the latter is volitional consciousness capable of modifying the former. In his pursuit of laws of thought, he investigates the relative autonomy of psychology from physiology. Just as the physiological is relatively independent from the physical, the psychological is also relatively free from the physiological. Yet, Allen falls into physiological reductionism without recognizing this relative autonomy. As he demonstrates that lower senses seek pleasure or pain "immediately present to the senses," whereas "higher coordinating structures" or "higher nervous functions" (199, 205) are in charge of aesthetic feelings "mediately suggested by means of the intellect" (196-97), his assumption is that there is no stark distinction between lower and higher qualities of mind.

The physiological, the psychological, and the social are interpenetrative with one another. Steven Rose, Richard C. Lewontin, and Leon J. Kamin hold that we should eschew both biological determinism and socio-cultural reductionism, since biological and socio-cultural factors are "codetermine" (11). While biological determinism suggests that human society is determined by biological conditions with the result of society being replaced with fragmented individual bodies and finally with their genes (59), socio-cultural reductionism (i.e., economic determinism or cultural pluralism) indicates that merely economic relations or cultural interests dictate human life (76-77). Distancing themselves from these two extremes, Rose, Lewontin and Kamin argue for "the integration of the social and the biological" (73). But Allen disrespects reciprocity among physiology, psychology, and sociality. His physiological aesthetics presupposes the elimination of psychic variations and socio-cultural contexts. It overestimates an influential power of physiology by unconditionally subordinating psychology and sociality to physiology.

IV. Conclusion

Founding *Mind* with Alexander Bain, George Croom Robertson proclaims this journal as "[t]he first English journal devoted to Psychology and Philosophy" (qtd. in J. Smith 294). One of primary topics in the journal is physiological psychology, "Physiological investigations of the Nervous System in man and animals, by which mental science is brought into relation with biology and the physical sciences generally" (qtd. in J. Smith 294). In the preface to *Mind*, Robertson details the primary significance of the journal publication:

> Include Mind, as it may possibly be included, in the widest conception of Nature, and it is like one half of the whole facing all the rest. Oppose it, as more commonly it is opposed, to Nature, and again Mind is nothing less than one half of all that exists; nay, in a most serious sense, it extends all that exists, because that which we call Nature, in all its aspects and all its departments, must have an expression in terms of thought or subjective experience (qtd. in J. Smith 304).

Robertson holds that if science aims for a study of nature, its object should be not only physical nature but also inner nature called human mind. He is confident that he can systematize even cognitive and affective qualities. The publication of the Journal *Mind* implies that the biologization of psychology was one of issues hotly discussed throughout the Victorian era.

Allen's physiological aesthetics is involved in this Victorian debate. His aesthetics participates in the contemporary science of the mind by biologizing affective experiences. Robert Michael Brain comments that the physiological turning of aesthetic experiences is a European intellectual phenomenon in 1870s (95). In a review of *Physiological Aesthetics*, an anonymous commentator portrays the popularity of physiological aesthetics as an "invasion of the region of aesthetics by natural sciences" (qtd. in Brain 95). Allen does not go hand in hand with metaphysical aestheticists like John Ruskin who scrutinizes deep spirituality underlying the sensation

of beauty (J. Smith 296). Ruskin rejects the word "aesthetic" to contend that observing beauty just for the purpose of pleasure is to "degrad[e] it to a mere operation of sense; humans ought to see moral, spiritual meanings going beyond the surface of beauty" (qtd. in J. Smith 296). Allen's physiological aesthetics is counter to this spiritualization of aesthetic experiences.

Since Allen radically tilts towards physiological reductionism, intriguingly enough, he takes himself to a paradox of his own aesthetics. He strives to argue for the physiological universality of different aesthetic appraisals to the detriment of his own evolutionary aesthetics. He downplays the differentiation of aesthetic experiences in favor of their physiological origins. Equally significant, Allen's observation of aesthetic disinterest deepens the paradox of his physiological aesthetics. Because he defines the highest version of aesthetic experiences, what he describes as aesthetic disinterest, as the kind of aesthetic feeling isolated from bodily needs, it clashes with his pursuit of physiological origins of aesthetic feelings.

More seriously, Allen's physiological aesthetics postulates the deconstruction of disciplinary boundaries among physiology, psychology, and sociality. For him, there is no essential difference between the social, and the psychological, and the physiological. For socio-cultural and personal variations are eventually reduced to their physiological foundations. Regrettably, Allen takes no notice of the over-determination of the physiological, the psychological, and the social.

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❖ 국문초록

그랜트 알렌의 생리학적 환원주의의 역설

이 성 범

영국 빅토리아 시대에 활성화된 문학과 과학 연구에서 뜨거운 논쟁 중 하나는 생리학과 심리학의 연관관계를 규명하는 것이다. 당시 많은 사상가들이 심리적 현상이 그것의 생리학적 원인으로 환원될 수 있는가의 여부에 대해 대단한 관심을 보였다. 예컨대 윌리엄 벤자민 카펜터(Willaim Benjamin Carpenter)는 심리라는 정신 현상은 생리라는 육체 현상과 근본적으로 다르다고 주장하고, 그랜트 알렌(Grant Allen)은 심리적 현상은 그것의 생리적 원인으로 환원될 수 있다고 여겼다.

본 논문에서는 알렌의 『생리학적 미학』(1877)에 나타난 생리학적 환원주의를 비판하고자 한다. 그의 미학은 대단한 역설을 품고 있다. 미적 인식의 점진적 발전을 주장하는 진화론적 미학을 주장하지만 궁극적으로는 이런 미적 발전 단계 구분을 부차적인 것으로 여기고 생리학적 보편주의를 제시하기 때문이다. 색깔에 대한 미적 판단의 진화를 예로 들면, 알렌은 인류 진화의 초기에는 화려한 색깔을 선호하다가 점진적으로 차분한 색깔로 '자연선택' 된다고 말한다. 색깔 선호의 이런 점진적 발전은 감각신경의 정교한 발전과 비례한다고 주장한다. 그러나 알렌은 궁극적으로 미적 인식의 이런 진화론적 발전 보다 미적 쾌락을 가능하게 하는 보편적으로 존재하는 감각신경 구조가 있다는데 더 큰 가치를 부여한다. 더 나아가 미적인 대상을 인식하는 방식에 있어서는 식물, 동물, 인간은 본질적으로 차이가 없다고까지 말한다. 미적 인식의 발전 단계를 설정하여 서열화하는 대신 누구에게나 존재하는 보편적 미적 감상 능력이 더 의미있다고 생각하는 미적 평등주의를 드러낸다. 이런 미적 보편주의는 인간에게 내재된 신경생리학적 구조의 보편성에 기인한다고 강조한다. 지적 판단이 개입되는 고차원적 미적 인식과 저급한 감각적 미적 인식의 차이는 질적 차이가 아니라 양적 차이일 뿐이다. 알렌이 정의하는 미적 사심 없음이라는 개념은 그의 이런 역설의 미학을 더욱 극명하게 보여준다. 그는 생리적-실용적 욕구에서 벗어나 그 자체의 쾌락을 추구하는 사심 없는 미적 판단을 최고 수준의 미적 인식이라고 말한다. 육체적-생리적-물질적-실용적 욕구에서 멀어지면 멀어질수록 미적 인식이 높다고 주장한다. 문제는 사심 없는 미적 관심이란 고차원의 미적 판단 능력도 결국은 신경 구조의 복잡한 발전에 기인한다고 보고 있어 다시 생물학적-생리학적 절대주의로 귀결한다. 필자는 알렌의 이런 모순된 주장을 생리학적 미학의 역설이라 부른다.

알렌의 미학은 사회적, 정신적 영역의 존재를 제대로 인정하지 않고 오직 신경-생리적 요인만을 절대화한다는 면에서 생물학적 순수주의를 표방한다. 현실은 물리적-생물학적 현실과 더불어 사회적, 개인적 요인들이 중층 결정된 구조인데 알렌은 이를 지나치게 단순화하여 생리학적 환원주의에 빠진다. 정치, 문화적 상황이나 개인적 취향의 다양성을 부차적인 요소로 과소평가하고 오직 육체적-생리적-감각적 요인만을 최우선시 하기 때문이다.

주제어 : 생리학적 환원주의, 그랜트 알렌, 심리생리학, 생물학적 순수성, 사심 없는 미적 관심

논문접수일: 2016년 08월 10일
심사완료일: 2016년 09월 05일
게재확정일: 2016년 09월 06일