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BULLETIN
MADISON COLLEGE

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Foreword

STUDIES AND RESEARCH is the first issue of a bulletin which will be published each year in February.

Faculty members of Madison College are deeply interested in scholarly pursuits and many of them engage in research and writing. In view of this the College has decided to provide a publication in which the scholarly work of the faculty may appear. Thus, it may be made available to others, and also the work of productive scholars on the faculty may be more appropriately recognized. Abstracts of studies and research by some students will also be included in the bulletin.

The administration of the College wishes to encourage and foster investigation and writing on the part of the faculty. For some years an administrative policy has been in effect which permits faculty members undertaking approved research to carry reduced teaching loads. It is believed that this bulletin will furnish additional stimulation to faculty members to investigate and to appear in print.

This bulletin is being distributed to administrators and librarians of institutions of higher learning in Virginia and other states. Copies are also being sent to affiliated academic organizations and boards. It is hoped that the recipients will find this publication interesting and informative.

G. Tyler Miller  
President

Percy H. Warren  
Dean of the College
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The Officers and Administration of the College are engaged in the development and management of the College's mission and programs. The College's leadership is committed to ensuring that the educational experience of its students is of the highest quality. For information on the College's mission and programs, please contact the Office of the Dean. For more information on the Administration of the College, please visit the College's website or contact the Office of the President.
PARADISE LOST

AND

HOBBES' CRITICAL DICTA

JAY L. CURTIS

This study attempts a brief analysis of Paradise Lost in the light of major critical normae of Milton's day, those set forth by Thomas Hobbes in his Vertues of An Heroic Poem, attached as a preface to his translation of the Odyssey.¹ The object will not be to derive Milton's practice from Hobbes' theory, nor will it be to prove Milton's intention by citing certain harmonies between the poet and the critic.² Rather, the task here will be simply to show how Paradise Lost follows, or fails to follow, significant critical precepts of the day. The result might be yet another footnote attesting to Milton's poetic independence and artistic sophistication.

The absence of any formal theory of the epic written by Milton himself might suggest an attempt to derive the principles underlying Paradise Lost as much from the theory of Milton's distinguished contemporary as from classic examples of the epic or from historical criticism or even from Paradise Lost itself, for

²For a lively discussion of the poet's intention in critical analysis, see W. K. Wimsatt, Jr., and Monroe C. Beardsley, "The Intentional Fallacy," Sewanee Review, LIV (1946), 466-88; also see Monroe C. Beardsley, Aesthetics (New York, 1958), p. 17, passim. Indeed, modern critics tend to disparage any attempt to draw a connection between a poet's intention and the final success of the poem because (1) the poet's intention is seldom available to the critic unless the poem itself reveals it, for comments by poets about their intentions are either non-existent or vague, like Milton's, or subject to doubt, like Poe's, and unproductive as critical instruments and (2) when a poem succeeds in revealing a poet's intention, the information gained thereby is extrinsic to the poem as a work of art, though it might be interesting as literary history.
Hobbes, far from being solely a much maligned philosopher and political theorist, was an intellectual light and the leading epic critic of his time; but, as will be seen, the differences in thought and artistic temperament between the poet and the critic were as great as their similarities. So, as Swedenberg aptly suggests, Milton's epic theory can better be derived from *Paradise Lost* itself.\(^3\)

The contrasting personalities of Milton and Hobbes, their differing positions as representatives of their age, and the comparative nature of their literary contributions have long interested students of that era. Wolfe pointed out many of the elements in the contrasting social tempers of Milton and Hobbes.\(^4\) Nicholson examined their opposing metaphysical concepts and concluded from a statement made to Aubrey by Milton's widow that Milton knew but did not like Hobbes.\(^5\) Nicholson has found that "their interests and tenets were diametrically opposed." Hanford has suggested that the doctrines set forth in *Leviathan* would have been anathema to Milton and that *Paradise Lost* might have been an "inspired utterance against this great antagonist of the faith."\(^6\)

However great their differences about the body politic or the social order might have been, they nevertheless held in common certain aesthetic tenets. At the beginning of any consideration of Hobbes' "Vertues" of an epic with reference to *Paradise Lost*, certain of these general critical opinions held by Hobbes and by Milton should be examined. Hobbes states, for example, that the elements of an epic poem can be summed up in the one word "Discretion." This he defines as "that every part of the poem

\(^3\)Hugh Thomas Swedenberg, Jr., "The Neo-Classic Theory of the Epic" (University of North Carolina Dissertation), concludes part I of his thesis with a brief discussion of Milton's contribution to epic theory, which consists of a few scattered remarks by the poet. He concludes: "In order to get Milton's theory, one must go to his practice and derive it."


be conducing and in good order placed, to the end and design of the poet. And the design is not only to profit but also to delight the reader.”⁷ “Profit” is the “accession of prudence, justice, fortitude by the example of such great and noble persons as he introduceth ...” By “delight” he means “to furnish an ingenuous reader (when his leisure abounds) with the diversions of an honest and delightful story, whether true or feigned.”

Indicating by these statements that epic poetry has a twofold purpose, Hobbes notes the pleasing effects without losing sight of the didactic. He agrees with Sir William Davenant, who stresses the teaching function of poetry in the Preface before Gondibert:

... we have first observed the four chief aids to Government, Religion, Armes, Policy, and Law, defectively apply'd, and then we have found them weak by an emulous war amongst themselves: it follows next we should introduce to strengthen those aids (still making the people our direct object) some collateral help, which I will safely presume to consist in Poesy.⁸

In his Answer to Davenant, written in 1650, Hobbes perhaps states a conviction rather than a mere courtesy to Sir William:

I add to your justification the purity of your purpose, in having no other motive of your labor than to adorn Vertue and procure her lovers, then which there cannot be a worthier design, and more becoming worthy Poesy.⁹

Although it is not always safe to generalize from the random statements found in the works of a poet, it can be fairly assumed that Milton possessed a general theory of poetic creation similar to that of Hobbes. Both believed that the epic should teach and delight. Milton followed the tradition of Horace,¹⁰ who wrote in Ars Poetica the classic concept of poetic purpose: “aut prodesse aut delectare.” Like Hobbes, Milton considered the adornment

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⁷Spingarn, loc. cit.
⁸Spingarn, op. cit., II, 44.
⁹Ibid., p. 58.
of virtue a primary function of poetry. The abilities of a poet, he states,

are of power besides the office of the pulpit to imbreed and cherish in a great people the seeds of virtue and public civility, to allay the perturbations of the mind, and to set the affections of the mind in the right tune . . . teaching over the whole book of sanctity and virtue through all the instances of examples, with such delight, to those especially of soft and delicious temper, who will not so much as look on Truth herself unless they see her elegantly dressed . . .

Milton considered poetry a sort of sugar coating for the bitter pill of truth, and it is not clear from his pronouncements that he considered the element of delight an end in itself; the suspicion that the pleasing value of poetry was with Milton but a necessary means to an end is rather persistent. However, he recognized the dual role of poetry and in this agreed with Hobbes. But when specific characteristics of an epic are considered, Hobbes' theory does not agree in every respect with Milton's practice. The divergence can best be seen when an attempt is made to apply Hobbes' seven "vertues" to Paradise Lost.

Hobbes states that all the critics of the epic can be satisfied "if the poem be as it should be," listing those qualities that concur to make "the reading of an Heroique Poem pleasant": (1) the choice of words; (2) the construction; (3) the contrivance of the story or fiction; (4) the elevation of fancy; (5) the justice and impartiality of the poet; (6) the clearness of description; (7) the amplitude of the subject.

Concerning the choice of words he says

... the first indescretion is the use of such words as to the readers of Poesy (which are commonly the persons of best quality) are not sufficiently known . . . And therefore foreign words, till by long usage they become vulgar, are not intelligible to them . . . The character of the words that become a heroe

The diction of *Paradise Lost* is often at variance with this precept. For the most part, Milton’s language is not the speech of men but of gods and devils. His vocabulary must somehow sing of Heaven and roar and hiss of Hell, struggle with the laboring Satan as he makes his perilous way to the World, glide with airy cherubim, prowl with desolation in the realm of Chaos and Old Night, and ramble in the regions of sorrow and doleful shades. “Milton,” says Hanford, “is simply carving a way for himself, remoulding and creating with fine disregard for precedent.” The poet brings into his creation a wealth of bold words, unusual, archaic, and foreign, creating with them at will pictures of desperate battles, or of howling Cerberian mastiffs, or of the Adversary poised on the brink of Hell about to raise his sail-broad vans and leap with hellish courage toward the kingdom of the Anarch. A breath of art, a quintessence, is blown upon the words, in themselves chaotic, and from them the universe takes its shape, created and living.

The poem was meant for only a chosen few: “fit audience . . . though few.” As noted above, Hobbes recognized that the readers of epic poetry were “commonly the persons of best quality.” As far as one can assume, Milton’s audience were to be of this class of “best quality,” that is, educated and temperamentally “fit” to accept his creation. Thus Milton felt free to go to whatever source of words promised him most effective material for the expression of his art. For this he did not hesitate to go to the far corners of the earth, even to where “Nature first begins her fardest verge,” and bring back to his poem the “wealth of Ormus and of Ind.”

Professor Hanford, discussing the foreign diction of *Paradise Lost*, modifies by way of footnote emphasis placed on Milton’s

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12 Spingarn, op. cit., p. 68.
13 Handbook, p. 293.
Latinisms. He says, "One unusual word of whatever origin, or one word used in a sense not English, may count more than a dozen which merely happen to be derived from Latin, and it is difficult to distinguish between effects of diction and effects of syntax." He also notes that the actual percentage of Milton's Latinisms is smaller than that of Samuel Johnson and many other writers. He suggests that the "unusual character" of Milton's style is caused by obscure mythological and Biblical allusions, other recondite references, and exotic names more than by the mere use of words of Latin origin.

Haven's study of Miltonic diction and style reveals specific examples of disregard for the Hobbesian rule of "discretion." This study shows that the poet was fond of close juxtaposition of exotic names, consciously sought archaisms, Latinisms, and compound epithets and did not hesitate to use one part of speech where another would have been grammatically more appropriate.

It cannot be assumed, therefore, that Hobbes would have approved of Milton's explorations in the nooks and crannies of world vocabulary. Hobbes, no doubt, would have found too few, even among his "best quality," to whom the diction of Paradise Lost would have been "sufficiently known." Yet there are times in scores of lines together when Milton seems to grow tired of adventuring in exotic diction, times when the words seem to lose their "property and significancy," and even times when they assume the character of "malice and lasciviousness of a satyr."

Hobbes' second "vertue," the facility of construction,

consisteth in a natural contexure of words so as not to discover the labor but the natural ability of the Poet; and this is usually called a good style. For the order of words when placed as they ought to be, carries a light before it, whereby a man may see the length of his period, as a torch in the night shows a man the stops and uneveness of his way.16

14Ibid., p. 294.
16Spingarn, op. cit., p. 69.
Insisting upon an adherence to the laws of versification governing number of syllables and rime, he states:

... the poet, having the liberty to depart from what is obstinate, and to choose somewhat else that is more obedient to such laws, and no less fit for his purpose, shall not be, neither by the measure nor by the necessity of rime, excused; though a translation may be.\(^{17}\)

Referring to Herbert's typographical pictures, The Altar and Wings, Hobbes states that an epigram or a sonnet may be composed of a shorter line than the pentameter, but he denies this license to the writer of an epic poem. Commending the hexameter verse of the classic authors, Hobbes adds:

... we use the line of ten syllables, recompensing the neglect of their quantity with the use of Rime. And this measure is so proper for an Heroique Poem as without some loss of gravity and dignity it was never changed. A longer is not far from ill prose, and a shorter is a kind of whisking, you know, like the unlacing rather than the singing of a muse.\(^{18}\)

Hobbes recognizes the fact that rime is troublesome and often "forces a man for the stopping of a chink to say somewhat he did never think," but he refuses to dispense with it altogether, compromising with Davenant's alternate rime instead of the usual couplet.\(^{19}\)

This second "vertue," like the first, cannot be applied to Paradise Lost. Neither in theory nor in practice did Milton wish to confine himself in the bondage of a "natural contexture of words" or to rime. For Milton, rime was not the "silken fetter" that bound into art the materials of Chaucer or of Spenser. He wished rather to be free to invent phrasal moulds, to involve periods, to draw out the sense variously "from one verse into another," to repeat and emphasize, to invert, to suspend, to feel the flow of his poetry in a "series of grammatical fragments."\(^{20}\)

\(^{17}\)ibid.

\(^{18}\)ibid., p. 57.

\(^{19}\)ibid.

\(^{20}\)Hanford, op. cit., p. 299.
Perhaps he had in mind the restraining rules of rhetoric when he wrote in *Artis Logicae*:

> The form or very fashion of an art is not so much the methodical arrangement of its rules as its teaching of something useful; because of what it teaches rather than the manner of its teaching, an art is what it is.\(^{21}\)

There is no uncertainty as to what Milton thought of rime. Following his natural aversion to unnatural restraint, he considered rime “no necessary adjunct or true Ornament of Poem or good Verse, in longer works especially, but the invention of a barbarous Age, to set off wretched matter and lame meter.” In answer to criticism and inquiries, Milton explained in his preface to *Paradise Lost* his system of versification:

> . . . both Italian and Spanish Poets of prime note have rejected Rime both in longer and shorter Works, as have long since our best English Tragedies, as a thing of itself, to all judicious eares, triveal and of no musical delight; which consists only in apt numbers, fit quantity of syllables, and the sense variously drawn out from one verse into another, not in the jingling sound of like endings . . . This neglect then of rime so little is to be taken for a defect, though it may seem so to vulgar readers, that it rather is to be esteem’d an example set, the first in English, of ancient liberty recover’d to Heroic Poem from the troublesome and modern bondage of Rimeing.\(^{22}\)

Hobbes and Milton are apparently agreed as to the “contrivance” of an epic. Hobbes states:

> . . . there is a difference between a poem and a history in prose. For a history is wholly related by the writer; but in a Heroique Poem the narration is, a great part of it, put upon some of the persons introduced by the poet.\(^{23}\)

Much of the narrative of *Paradise Lost* comes from “some of the persons introduced by the poet.” The longest of these narrations by an actor is that of Raphael, who tells of events antecedent to the fall of the angels, thus bringing the action up to the beginning *in medias res*. Commenting upon and commending

\(^{21}\)See Langdon, *op. cit.*, p. 186.

\(^{22}\)Patterson, *op. cit.*, p. 159.

\(^{23}\)Spingarn, *op. cit.*, p. 69.
the Homeric tradition of beginning an epic *in medias res*, Hobbes finds this device "much more pleasant and ingenious than a too precise and close following of the time."

To Milton the device of beginning "in the midst of things" was not alone a gesture to epic tradition. It was pleasing to his sense of art as well as appropriate, if not necessary, to his ambitious subject; for when cosmic forces clash in perilous strife, when Heaven erupts and casts off a third of the Heavenly Host to lie like the leaves of Vallombrosa in the pit of Hell, when the gates of Hell are opened and Satan seeks the new-born earth, when Sin and Death are born, then there can be no sense of the temporal. Linear time stands still. There is no Now or Then or When. It is only when the earth is formed and "self-ballanc't on her Center" that time becomes a significant conception. Milton realized this and was preoccupied with the "sad task and hard" of presenting to human minds the "high matter" of "Heavens great Year," although

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Time, though in Eternity, appli'd
To motion, measures all things durable
By present, past, and future . . . .
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Hobbes doubtless would have approved of the "contrivance" of *Paradise Lost*, for he wrote of epic poets: "... there is no doubt but Homer excelled them all. For their Poems, except the introduction of their Gods, are but so many Histories in Verse; whereas Homer has woven so many histories together as contain the whole Learning of his time ..." So is *Paradise Lost* a tapestry of histories, woven with vast learning—Biblical, mythological, geographical, astrological, astronomical, philosophical, and theological—created, says Keats, in "the verse of art."

The matter of invocation of a muse may well be considered a part of the "contrivance" of an epic. Hobbes reveals his opinion of the invocation in his *Answer to Davenant*:

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24*Paradise Lost*, V, 280-82.
But why a Christian poet should think it an ornament to his poem, either to profane the true God or to invoke a false one, I can imagine no cause but a reasonless imitation of custom, of a foolish custom, by which a man, enabled to speak wisely from the principles of nature and his own meditations, loves rather to be thought to speak by inspiration, like a bagpipe.\(^\text{25}\)

Milton, perhaps with deference to tradition, chose to use the convention, but critics are disagreed as to the particular muse he invoked despite the fact that in Book I he refers to the Heavenly Muse and in Book VII invokes Urania as “Heav’nlie borne.” Professor Hanford reviews briefly the conflicting opinions of Larson, Fletcher, Kelley, and Murray and adds:

If one must have a theological formula it is best to say with Kelley that Milton’s prayers are addressed to God the Father, not to the Holy Spirit in any technical sense.\(^\text{26}\)

Hobbes considers the “elevation of Fancy the greatest praise of Heroique Poetry,” provided it is “governed by discretion.” In Paradise Lost this “elevation” is achieved largely through a decorous use of many and varied figures aided by suggestive vagueness. At Milton’s command lie centuries of rich detail, much of which has become a part of his own experience and from which he can select at will the material for his imagery. The profound learning of Paradise Lost, no doubt, would have appealed to Hobbes. “That which giveth a poem the true and natural color,” he says, “consisteth in two things, which are, To Know well, that is to have images of Nature in memory distinct and clear, and To Know much.” And writing of fancy, which “begets the ornaments of a poem,” he says:

\[\ldots\] Fancy, when any work of art is to be performed, finds her materials at hand and prepared for use, and needs no more than a swift motion over them, that what she wants and is there to be had, may not lie too long unespied. So that when she seemeth to fly from one Indies to the other, and from Heaven to Earth and to penetrate into the hardest matter and obscurest places, into the future and into herself, and all this in a point

\(^{25}\)Spingarn, op. cit., p. 59.
\(^{26}\)Hanford, op. cit., p. 194.
of time, the voyage is not very great, herself being all she seeks; and her wonderful celerity consisteth not so much in motion as in copious Imagery discretely ordered and perfectly registered in the memory.  

Hobbes amplifies the province of fancy in poetry:

\[
\ldots \text{in Fancy consisteth the sublimity of a poet, which is that poetical fury which the readers for the most part call for. It flies abroad swiftly to fetch in both matter and words; but if there be not discretion at home to distinguish which are fit to be used and which not, which decent and which undecent for Persons, Times, and Places, their delight and grace is lost.}^{28}\]

For the most part the imagery and fanciful pictures of *Paradise Lost* meet the most severe test of discretion and poetic decorum. They are images finely drawn by an artist whose perspective was created by tenuous skeins of lights and shadows like those outlining the evening and morning of the first day. Upon this imagery Professor Thompson remarks significantly:

In the intricate and closely woven periods, especially of *Paradise Lost*, Milton draws the most elaborate pictures. They are not vivid, clear-cut pictures such as Dante draws with a few expressive words; for where Milton depicts something in a few words he uses suggestion rather than definite detail. Even in the long descriptions the effect is chiefly derived from suggestion.\(^{29}\)

One image must suffice to show from a gallery of superb paintings Milton’s unique artistry:

\[
\begin{align*}
\text{Before their eyes in sudden view appear} \\
\text{The secrets of the hoarie deep; a dark} \\
\text{Illimitable Ocean without bound,} \\
\text{Without dimension, where length, breadth,} \\
\text{and highth,} \\
\text{And time and place are lost . . . .}^{30}\end{align*}
\]

The office of Fancy in *Paradise Lost*, according to Professor Greenlaw’s interpretation, is to “form imaginations of all external

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\(^{27}\text{Spingarn, op. cit., p. 29.}\)
\(^{28}\text{Ibid., p. 70.}\)
\(^{29}\text{Elbert N. S. Thompson, Essays on Milton (New Haven, 1914), p. 204.}\)
\(^{30}\text{Paradise Lost, II, 890-94.}\)
things supplied by the five senses.”  

This was also the office of Fancy in Spenser’s House of Alma, and Professor Taylor notes analogy in Du Bartas. But in Milton Fancy also serves as a handmaiden to Reason:

But know that in the Soule
Are many lesser Faculties that serve
Reason as chief; among these Fansie next
Her office holds; of all external things
Which the five watchful senses represent
She forms imaginations, Aerie shapes,
Which Reason joining or disjoining, frames
All what we affirm or what deny, and call
Our knowledge or opinion . . . .

With Hobbes the psychological aspect of Fancy was somewhat different from that shown in the account from Paradise Lost. Thorpe’s study of Hobbes’ aesthetic is revealing. With Hobbes, he says, “Fancy chooses her details not from external objects . . . but from the broad field of remembered experience.” With Milton, we have seen, Fancy forms imaginations from

all external things
Which the five watchful senses represent.

Here it is the function of Reason to test the imaginations, “joining or disjoining,” and form knowledge. With Hobbes the details derive from past experience. Thorpe continues:

These details are joined, not according to an idea of beauty mysteriously implanted in the mind from above or evolved from the sight of many fine artistic models, but according to the dictates of the judging faculty of a mind working in harmony with the principles of true philosophy: that is, principles de-

32Faerie Queene, II, ix, pointed out by Professor Greenlaw, Ibid.
33George Coffin Taylor, Milton’s Use of Du Bartas (Cambridge, 1934), p. 29.
34Paradise Lost, V, 100-109.
rived from a study of nature and the habit of proceeding from causes to their effects.\textsuperscript{36}

And:

... the degree of truth and perfection to be found in artistic imitations of nature will be conditioned both by the extent of a given poet's experience, consequently by the volume and richness of his stored memories, and by the particular operations of fancy and judgment upon these materials.\textsuperscript{37}

Milton's conception of Fancy differs from that of Hobbes in the sense that the latter admits no immediate operation of sense impressions. Originally materials are received into the mind through the senses, but at the time that fancy and judgment are acting upon these materials, they have already become a part of the memory and are viewed as experience.

It is in the spiritual realm of "high matter" that Fancy would come to Milton's aid. Here "perfect perception," demanded by Hobbes, was extremely difficult, for the human mind, unless inspired by divine guidance, cannot easily grasp the "invisible exploits" of spirits warring in Heaven. The problem was acute:

\begin{quote}
what surmounts the reach  
Of human sense, I shall delineate so,  
By lik'ning spiritual to corporal forms . . . . \textsuperscript{38}
\end{quote}

Hobbes would admit no operational benefit from inspiration.\textsuperscript{39}

To Milton inspiration was necessary:

\begin{quote}
higher Argument  
Remaines, sufficient of it self to raise  
That name, unless an age too late, or cold Climate, or Years damp my intended wing  
Deprest, and much they may, if all be mine,  
Not Hers who brings it nightly to my Ear.\textsuperscript{40}
\end{quote}

\textsuperscript{36}Ibid., pp. 163-64.  
\textsuperscript{37}Ibid., p. 164.  
\textsuperscript{38}Paradise Lost, V, 571-73.  
\textsuperscript{39}Supra, note 25.  
\textsuperscript{40}Paradise Lost, IX, 42-47.
Both Hobbes and Milton recognize the poetic evil of an uncontrolled Fancy, Hobbes demanding the continuous presence of discretion. With Milton, Fancy can have full control only when Nature is at rest, that is, when the body is asleep, and reason retired "into her private Cell." At such a time Fancy, uncontrolled, seeks to mimic Reason; and in Milton's psychology, this act accounts for dreams.

Hobbes states that the justice and impartiality of a poet "belongeth as well to History as to Poetry. For both the Poet and the Historian writeth only (or should do) matter of fact." He amplifies this statement in the *Answer to Davenant*:

> For as truth is the bound of Historical, so the Resemblance of truth is the utmost limit of Poetical Liberty . . . Beyond the actual works of nature a poet may now go; but beyond the conceived possibility of nature, never.\(^{41}\)

Again he says:

> And as far as the truth of Fact can defame a man, so far they are allowed to blemish the reputation of Persons. But to do the same upon report, or by inference, is below the dignity not only of a Heroe but of a man. For neither a poet nor a historian should make himself an absolute Master of any man's good name.\(^{42}\)

These are precepts applicable to poems that deal with mortal men. There is no censure and no blame, no defamation of character, that can be attached to God; Satan, below censure and blame, is defamation itself. Milton censures only what he considers weakness and levity and yielding to temptation. But he is not without bias. Women, for example, were to him far from ideal, and his character of Eve, revealing his keen interest in womanhood, was drawn more from his own unhappy experience than from his Scriptural sources. Milton's convictions, resulting from mental discipline but not always supported by fact, often engendered unconscious prejudices. Among these perhaps the

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\(^{41}\)Spingarn, *op. cit.*, p. 62.

\(^{42}\)Ibid., p. 70.
strongest was his religion. His Puritan convictions led him to unceasing and uncompromising opposition to the Catholics, at whom he hurled indecorous thrusts in *Paradise Lost*, Book III, casting them along with embryos and idiots out of the Paradise of Fools. Sampson remarks significantly upon Milton's lack of objectivity: "In Milton the rage of conflict, while it lasted, deprived him of anything like judicial impartiality; at times it robbed him of ordinary fairness."  

But it is easy to dwell upon prejudiced attitudes and overlook the broader fact that in *Paradise Lost* a vast wealth of knowledge is presented with the detachment of an impartial historian. If *Paradise Lost* was not composed with the mechanical precision of a faultless artisan, it must be admitted that behind its conception and execution lay the fundamental honesty of a Puritan.

Hobbes' sixth "vertue" "consists in the perfection and curiosity of Descriptions." In this he is concerned primarily with "images," about which he says:

> The grace lieth in the lightsomeness, and is but the description of all, even the minutest, parts of the thing described; that not only they that stand far off, but they that stand near, and look upon it with the oldest spectacles of a Critique, may approve it.  

Hobbes considered an image "a part, or rather the ground, of a poetical comparison," that is, the part of the epic simile introduced by the "As when" formula before the completion is begun with "so," expressed or understood. The whole simile he called the "Comparison entire."

Although in some respects Milton departed from established convention in the construction of his similes, it seems fairly certain that Hobbes would have approved of his methods. No strict conventionalist, Hobbes recognized that many contemporary English poets were composing similes as good as Virgil's.

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44 Spingarn, *op. cit.*, p. 70.
Tradition in the construction of the simile demanded that small things be compared to large. Tasso approved this manner and said that greater things should not be compared to small. Hobbes, however, failed to recognize this dictum, approving the Virgilian simile comparing the fall of Troy to the felling of a tree. Milton, although apparently agreeing with the precept of Tasso, could not form the similes of Paradise Lost upon this principle. The nature of his characters and of his theme forced him to compare great things to small. There was nothing greater or more exalted than God and nothing more evil than Satan. The multitude of fallen angels were like the leaves of Vallombrosa, or like sedge, or like locusts, or like a vast horde of Vandals from the North. And Satan’s size was like a tower:

He, above the rest
In shape and gesture proudly eminent,
Stood like a Tower . . . .

Professor Hanford writes of Milton’s similes:

Where he is original the materials of his comparison are sometimes based on simple observation of nature, but oftener on myth and legend, history, travel, science, or the technical arts. These digressions are for him a welcome means of pouring forth the treasures of his mind.

In this connection it should be noted that Milton’s use of the simile is not simply for pictorial effect. There is often the spirit of the teacher in his comparisons. He is a Hobbesian “poetic fury” that flies forth and gathers what is “fit” for his purpose as an artist and as a teacher. Langdon’s remarks on the propriety of the similes in Paradise Lost argue for the consideration of the comparisons in relation to the poem as a whole and not as detached figures which in themselves may be artistically imperfect or lacking in poetic decorum:

45 Langdon, op. cit., p. 143.
46 Spingarn, op. cit., p. 74.
47 Paradise Lost, I, 589-91.
48 Hanford, op. cit., p. 304.
Writers on Milton have assailed his taste, and reproached him for mean and lowly images, but they appear to have strained the evidence, and have deduced very little that deserves censure.\textsuperscript{49}

Milton himself in \textit{An Apology Against a Pamphlet} defends the figures from everyday life: "Doth not Christ himself teach the highest things by the similitude of old bottles and patched clothes?"\textsuperscript{50}

But aside from the question of the dimensions or of the dignity of the things to be compared, Hobbes requires a complete, full, description. Here again Milton's subject prevented him from any such candid approach. He may even at times be guilty of Hobbes'

\ldots ambitious obscurity of expressing more than is perfectly conceived, or perfect conception in fewer words than it requires. Which Expressions, though they have the honor to be called strong lines, are indeed no better than riddles, and, not only to the reader but also after a little time to the Writer himself, dark and troublesome.\textsuperscript{51}

Hobbes' final "vertue" is "the Amplitude of the Subject," which "is nothing but variety." This virtue does not lie in a superfluity of words but in a multitude of descriptions and comparisons. As examples, Hobbes mentions shipwrecks, battles, single combats, beauty, passions of the mind, sacrifices, entertainments, "and other things." But Milton was not "skilled nor studious" to

\begin{quote}
\textbf{Wars, hitherto the onely Argument}
\textbf{Heroic deemed, chief maistrie to dissect}
\textbf{With long and tedious havoc fabl'd Knights}
\textbf{in Battels feign'd}
\end{quote}

\textsuperscript{49}Langdon, \textit{op. cit.}, p. 147.
\textsuperscript{50}Ibid., p. 146.
\textsuperscript{51}Spingarn, \textit{op. cit.}, p. 63.
or to describe Races and Games,
Or tilting furniture, emblazoned Shields,
Impreses quaint, Caprisons, and Steeds;
Bases and tinsel Trappings, gorgious Knights
At Joust and Torneament . . . .

For Milton there was higher argument than the traditional accouterment of the epic. Nevertheless, he recognized the necessity of variety, and he consciously sought it in range and amplitude of subject as his cosmic creations came into being and his vast lore took shape in a record of deception and revenge, pristine innocence, degradation, beauty, and shame. *Paradise Lost* is, therefore, an epic of rich variety, meeting the demand for "amplitude of subject" perhaps more fully than any other poem.

Milton was not slavishly following any poetic convention: he held no man his prototype. But out of a life of rich learning and experience, lived for the one great purpose that he might be worthy of his creative task, he drew the materials of his poem. Only partially satisfying the precepts of Hobbes, *Paradise Lost* goes beyond their narrow and inadequate limits. It is, besides a repository of learning in many disciplines, a poetic echo of the human condition since man's first disobedience and the fall. It is no less a record of human suffering, the despair of one man as well as of the human race, than it is of man's hope, engendered of courage and a steadfast will. Disregarding many dictates of epic convention, Milton forged the poetry of a new Heaven and a new Earth, much of it in the midst of personal disappointment and travail, and the quintessence was the "inner light" of a noble dedication.

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52 *Paradise Lost*, IX, 27-37.
Throughout Northeast Louisiana, as in so many other areas, the regular classroom teacher is confronted with the problem of educating the mentally retarded child when there are too few or no special education classes designed to meet the needs of such children. If the mentally retarded child is being educated in an environment in which competition is severe, he is penalized in certain areas of personal adjustment. In regular classroom placement, the mentally retarded child may achieve academically to the extent that he is capable, but if he is under pressure to achieve on the same level as the average and above average classmate, maladjustment in personality may occur. The mentally retarded can neither understand nor cope with academic pressures, and any potential adjustment on his part is discouraged by such a setting.

As our knowledge about exceptional children increases, we can hope to provide an educational program that will meet their needs. As we evaluate our present thoughts concerning the mentally retarded child, we can discern the strengths and weaknesses that show us the way to needed changes within the classroom.

This study evaluates a group of educable mentally retarded children enrolled in the public schools of Northeast Louisiana.
The author attempted to determine whether or not these children were achieving at the expected academic level in a regular classroom setting; to ascertain the characteristics of the children as seen by the regular classroom teacher; and to determine whether or not their personal and school adjustment was lower than that of the average child as seen by the teacher.

The subjects of the study were selected from a group of children referred to the Special Education Center of Northeast Louisiana State College, Monroe, Louisiana. The children were referred for reasons of academic, social, or behavioral problems. The Special Education Center evaluates children with educational difficulties in nine Louisiana Parishes.

The select group of children represents fifty-nine per cent of the 157 cases evaluated by the educational consultant in the school year 1961-62. All subjects selected were within the intellectual range of fifty to seventy-five intelligence quotient with the exception of four children. One of those four had an intelligence quotient between seventy-five and eighty. Those four were considered by the psychologist as being educable mentally retarded. The subjects were scattered through the first six grades of the public schools with only six subjects representing grades seven and eight. The identification procedures resulted in a sample of sixty-three educable mentally retarded boys and thirty educable mentally retarded girls from eight grades within the public schools of the nine parishes.

The fact that there were few referrals from the higher grades may indicate that teachers become accustomed to the mentally retarded children and therefore do not refer them or that many of the educable mentally retarded children have dropped out of school in the upper grades.

The chronological ages of the male subjects used in this study ran from a mean of six years, eight months, in the first grade to seventeen years, no months, in the eighth grade. The chrono-
logical ages for the female subjects used in this study ran from a mean of six years, eight months, in the first grade to thirteen years, no months, in the sixth grade. There were no female subjects in grades seven and eight.

**Discussions and Conclusions**

Ninety-three subjects were chosen from the referral group of 157 children. Twenty children had been placed in a first grade, seventeen in a second grade, nine in a third grade, fifteen in a fourth grade, fifteen in a fifth grade, ten in a sixth grade, four in a seventh grade and two in an eighth grade. The small sample group is not a result of a larger percentage of these children already being placed in special education classes. A survey of special education classes available in the area indicates that a small percentage of children of this age are enrolled in special classes.

Mentally retarded boys in this population appear to have a slight edge over mentally retarded girls in academic achievement in the regular classes. Boys appear to be somewhat better in reading than girls and the mentally retarded as a group appear to reach the limits of their academic expectancy in the regular classes. Even though the mentally retarded as a group have reached their academic expectancy in a regular classroom, the results of this study indicate they have suffered in other areas pertaining to school adjustment.

We may also conclude that the mentally retarded achieve somewhat higher in arithmetic, as measured by standardized tests, than they do in reading or spelling and that their achievement in reading appears to be somewhat better than their achievement in spelling.

A larger percent of the mentally retarded boys are considered to be below the average child in their interactions with their teachers. Further evidence within this study indicates that boys
appear to be much better in their courtesy and manners, personal appearance, honesty and personal grooming than they are in their tact and diplomacy, dependability, personality, self control, and emotional adjustment as seen by their teachers. The girls also appear to their teachers as being much lower than the average child in the areas of dependability, personality, personal appearance, personal grooming, and emotional adjustment; however, they appear to be average and above in their honesty, courtesy, and manners. As a group, the educable mentally retarded appear to their teachers to be much better in their courtesy and manners, honesty and personal grooming than they are in their tact and diplomacy, dependability, personality, personal appearance, self control and emotional adjustment.

The mentally retarded boys appear to be of cheerful disposition and when placed in a regular classroom they are not efficient in school work, sincere in school, or enthusiastic toward school or toward work in school. Their cooperation and work attitude seems to be well below the average when in a regular classroom. These behavior problems are probably magnified by regular classroom placement. In this type of an environment they do not have the opportunity to capitalize upon their mental ability to its fullest potential because curricula are adjusted to the average child. As stated previously, the mentally retarded as a group reach their academic achievement potential, but the curriculum designed for the average class hinders other learning such as the development of wholesome attitudes toward school. Therefore, we can see that the child with intellectual limitations might not appear to be cooperative or have a good work attitude in school because the material presented is often more difficult than he can grasp.

Furthermore, the average and above average children recognize and comment upon the limitations of the mentally retarded child. Mentally retarded girls as a group appear to be somewhat enthusiastic toward school but are far behind the average child
in their efficiency in school work. Mentally retarded girls appear to be sincere in their school work. Their work attitude in school seems to be slightly below that of the average child but they seem to be as cheerful as the average child.

The consultant believes that the large percentage of the mentally retarded girls that were considered by the teacher to have average or above intellectual qualities is largely responsible for the disproportionate number of boys in referrals. Although approximately the same percentage of boys were considered by their teachers as having average, or above average, qualities of intelligence, it is probably true that other factors encouraged more male referrals. Negative behavior in the classroom, for one thing, probably caused many referrals.

Teachers in this study indicated that they saw a large percentage of the mentally retarded boys and girls as achieving as well as the average child in their class. This is no doubt partly due to a large number of first graders examined in this study. Nevertheless, it emphasizes that labeling a child as having a certain intelligence quotient should be guarded against until an evaluation is completed by qualified specialists. Most of the reasons for teachers considering these children average and above in intelligence were due to the teachers thinking that some factor other than intelligence was hindering the child’s achievement, such as, laziness, less ambition, and emotional problems.
AN AESTHETIC EVALUATION
OF
SERIAL COMPOSITION

JOSEPH LEVEY

A living art form is by its very nature a progressive, ever-changing development. When development ceases, when a given set of conventions becomes crystallized into a static form, it has become mere academicism. The classic works of the old masters express the beauty of the past; the contemporary artist must attempt to create a new beauty out of the present if he hopes to achieve a truly vital work of art.¹ This, he knows, is not possible within the framework of a spent tradition. The function of art is not to imitate the past but to reflect its own era. Certain means or techniques of expression are developed in every art, and in time these become the accepted traditional methods of artistic expressiveness. When these methods are no longer useful or effective, other techniques must be devised by the artist to accomplish his purposes. The disintegration of previous conventions is the necessary process of growth in a living art form.

Certainly it was apparent to the creative composer that the so-called great tradition of Western music had become a barren art form. It had passed its peak of development and degenerated into over-sentimentality and romanticism, or into mere classical formalism bounded by rigid rules of form and tonal conventions. Therefore the breaking down of tonality by the row or twelve-tone system of composition expounded by Schoenberg, and even

¹John Macmurray stresses this in his discussion of the artist as "the architect of the real future" in Reason and Emotion (New York, 1937), pp. 166-69, and examines the fallacies of what he calls the "cult of the antique."
the subsequent extension of the serial concept, can be regarded as the natural, useful, and quite justified rebellion of the creative artist against an academic confinement. The relationship between traditional and serial composition can perhaps be clarified by the use of the terms thesis, antithesis and synthesis. If traditional Western music is accepted as the thesis, then serialism ² is the obvious antithesis. That phase of development which may become the synthesis would logically free the composer from the more rigid principles of both the traditional and the serial approach, allowing him to utilize those elements and devices from either system which can enhance the aesthetic vitality of his own work.

The question raised here is not whether the manifestation of serial composition is justified, but whether this ultimate antithesis of our traditional musical heritage is a valid art form in itself. It is a demonstrable fact that any real antithesis, such as serialism, is almost inevitably condemned to adopt the negative role of hostile opposition—to renounce too completely the sound contributions of past development. The following statement by Bela Bartok is an illuminating description of ideal growth:

Only a fool would build in defiance of the past. What is new and significant always must be grafted to old roots that are chosen with great care from the ones that merely survive. And what a slow and delicate process it is to distinguish radical vitality from the wastes of mere survival, but that is the only way to achieve progress—instead of disaster.³

Consider this entirely opposite view expressed by Pierre Boulez in the April, 1952, issue of La Revue Musical, in which he speaks of his own contributions toward the furtherance of serialism:

There now exists a conception of composition which need no longer refer back to the classical structures, not even to destroy them. I feel that it is now possible to move unimpeded toward

²"Serialism" and "serial" are employed according to their usually accepted usage among theorists, meaning the extension of the row concept to other components of music—not to pitch alone.
a highly authentic form of being which, in its autonomy, will no longer need to repudiate anything whatsoever.\textsuperscript{4}

Such divergent opinions as these, expressed by two composers of recent and present time, serve to illustrate the vast confusion that exists as to how much of our past musical resources can be validly utilized by the contemporary composer and how much should be discarded. (And M. Boulez notwithstanding, whatever is no longer used, or even referred to, has been effectively repudiated.) The belief that a system of composition, in order to reflect modernism, must be autonomous—that it must exist entirely independently of the whole history of music—is a ridiculous fallacy. It is possible to produce vital and original music not only by the use of totally new techniques but also by the way in which older procedures and older idioms are employed. To accept the \textit{whole} of the serial approach to composition, thereby rejecting the \textit{whole} of our traditional resources, denies the continuity of art. That much dead wood needs to be cut away is indisputable. But is it really wise to cut ourselves off completely from the roots from which we grew? It would appear that such extreme action is more likely to result in atrophy than in the spectacular new growth that many apparently expect.

The extension of the serial principle to its maximum application is nothing less than the control of all the components of music by the imposition of a mathematical pattern which pre-determines pitch, duration, rhythm, tone-color, types of attacks, registers and intensities.\textsuperscript{5} Thus it becomes clear that serialism has gone much farther than the mere disavowal of past traditions. It has assumed the classic attitude of the final antithetic stage of development—the destruction or rejection of an overly restrictive code or set of conventions only to replace them by a different complement of regulations that are either equally restrictive or

\textsuperscript{5}Ibid., p. 134. See, e.g., Hodeir's description of the goals Boulez set for himself in composing \textit{Polyphonie x}. 

more restrictive than those previously rejected. The restrictions of serial composition are inherent in its character, as Boulez affirms in the November, 1957, issue of La Nouvelle Revue Francaise:

The adaptation of the serial concept to composition itself . . . by incorporating the more general notion of permutation into structural organization—a permutation the limits of which are rigorously defined in terms of the restrictions placed on its powers by the very fact of its self-determination—constitutes a logically and fully justified development, since both "morphology" and rhetoric are governed by one and the same principle of organization.

Any justification of music by an analogy to language or rhetoric is questionable, to say the least. If, as Andre Hodeir has said, "the great classical works were the fruit of an architectural approach to music," it is difficult to believe that the overthrow of this "architectural approach" merely to embrace the superimposition of yet another alien element is anything more than self-delusion.

In his most recent book, dealing with contemporary music and serial composition in particular, Hodeir provides an ironic and wholly unintentional commentary on the efforts of various composers to develop this new approach. "These creative destroyers," he maintains, "are probably destined to retrace their steps once more and spend the rest of their lives rehashing the works of their predecessors." (Italics mine.) Of Schoenberg he says:

[His] outlook in his old age was plainly backward-looking and out of step with history. The Ode to Napoleon, to name only the best of his fourth-period works, was written in a so-called

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6Ibid., p. 150.
8Hodeir, op. cit., p. 157.
9Ibid., p. 36.
twelve-tone tonality . . . The doubling of certain instruments at the octave may be regarded as another concession to the past.\textsuperscript{10}

Of Berg:

It is a pity that he wasted the last years of his life in a sterile attempt to retrace his steps, recapitulating the attainments of his predecessors.\textsuperscript{11}

Of Webern:

As [he] slowly groped his way toward a hitherto undreamt-of horizon, he would occasionally stop and retrace his steps; it was as though, standing on the threshold of the unknown, he had felt a sudden dizzy spell. It is hard to find any other explanation for the weak spots in his late works.\textsuperscript{12}

M. Hodeir is, of course, an exponent of the view that every vestige of our past musical heritage must be utterly erased from contemporary composition. Still, it seems remarkable that no other possible explanation for this compulsive "retracing of footsteps" occurs to him. If we grant that the composers in question possess integrity and intelligence, certainly it is not inconceivable that having rejected the thesis of traditional tonality, and having explored the inverse domain of antithesis (serialism), they may have come to feel that the complete answer was not to be found in either—and so began to move in the direction of synthesis. Thus what Hodeir sees as a backward-turning might in reality have been a further step forward.

The real test of any technical device, particularly one as all-encompassing as serialism, is its artistic result. In this respect few serial compositions have been completely successful artistic expressions. Schoenberg, using his twelve-tone or row system, achieved only limited artistic success. Others used it to advantage, of course, but even those composers such as Boulez and Webern, who made tremendous contributions toward the extension of the serial idea, have not attained the degree of artistic effectiveness that one might expect of such technical mastery.

\textsuperscript{10}Ibid., p. 54.
\textsuperscript{11}Ibid., p. 67.
\textsuperscript{12}Ibid., pp. 79-80.
Webern, in particular, is held in great esteem by many of today's younger composers. To the listener, however, his music has an aimless and fragmentary quality, although a study of the scores reveals the complex formulas which he has first established and then applied. There is a certain limited fascination in these structural accomplishments, but the musical product is strangely lacking in strength and substance.

Boulez considers himself Webern's successor. It is perhaps worth noting that his studies included mathematics and engineering, which may give some clue to his excessive preoccupation with the formulation of an extremely specialized method of composition. Hodeir suggests that "the reason behind Boulez's failure on the level of musical poetics—a failure which should normally have been spared him by virtue of his total success on the technical level—may lie in his excessive haste to compose." The more logical explanation for the failure of Boulez, and many others as well, may lie in the technique itself. The purpose of any technique is to serve expression—otherwise it is useless. If we pursue serialism to its inevitable culmination, it becomes apparent that the end result is a more rigid and unyielding form of academicism than the strictest traditional conventions so right-fully discarded as having become a hindrance to the composer's freedom of expression.

In the reaction against the excessive and sometimes superficial "emotional significance" of conventional composition, the serialists have chosen to remove music entirely from the realm of meaning. Hence they flee from one danger and dash headlong into the arms of another. Louis Arnaud Reid defines these two opposing dangers explicitly:

In true art-experience you cannot have mere intellectual interest in formal pattern like the interest in a jig-saw puzzle . . . It is only a matter of stress, and different works of art . . . vary in their stress on tension and extension. If they go beyond

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13 Ibid., p. 159.
certain limits in either direction they cease to be art. The fol-
lowing diagram may help to show what I mean:  

<table>
<thead>
<tr>
<th>Non-aesthetic</th>
<th>Aesthetic Sphere</th>
<th>Non-aesthetic</th>
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| Emotions, inter-
ests, and values
of life. | Interest more in effective side. | Interest more in formal side. | Pure intel-
llectual de-
light in structure and in solving pattern-pro-
lems. |
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tensive" sig-
ificance. | More "extensive" significance. | More "ob-
jective". | |
| More "sub-
jective". | Danger | Danger → |

And so we come face to face with the most difficult and crucial question in this whole area of contemporary music—is serial composition art at all? To arrive at an answer it is first necessary to formulate at least a working definition of what is meant by “art.” Countless philosophic and aesthetic definitions can be culled from a variety of sources, and the vast majority of them will be found to employ or imply the idea of “expression.” If, then, art is a creative form of expression it is evident that it must express something. What it expresses is not the reality of life as it actually exists, nor the knowledge of life that science gives us; it is not truth, perhaps, nor beauty—although these may be a part of it; certainly it is nothing so insignificant as a mere reflection of emotion. Art expresses a concept of feeling, which we can perceive through our physical, intellectual and emotional senses.

Even though the term “feeling” is used here in its broadest sense, this definition of art as an abstract expression of feeling is contrary to the precepts of serialism. Serial composition, by its fundamental preoccupation with the superimposition of a com-

15Macmurray, op. cit., p. 169, e.g., speaks of art as “the spontaneity of the personal, the expression of self.” Susanne Langer, whose philosophic discourses have searchingly explored the field of aesthetics in Problems of Art (New York), has defined art variously as the objectification of the subjective realm, p. 26; as an “expression which abstracts aspects of the life of feeling which have no names,” pp. 94-95; and as “apparent forms expressive of human feeling,” p. 109.
16Ibid., p. 15 and pp. 94-95, see Miss Langer’s qualifications of the use of the word “feeling” in aesthetics.
plex structural pattern which pre-determines content, has gone beyond the limits of the aesthetic sphere and entered a totally non-aesthetic area. The composers who adhere to the mathematic restrictions of complete serialization are not primarily interested in presenting "feeling" for anyone's perception. They tend to share with certain other musicians and musicologists the opinion that in order to preserve the purity of their art, they must remove it entirely from the realm of meaning.\textsuperscript{17} Insisting upon autonomy, the serialists concentrate on the formulas and cycles of permutation that are the principles of their rigorous style. These principles allow for little or no consideration of symbolic or emotive content. Nor is it possible, within the limitations of the form, to follow or develop conceptions suggested by the musical material itself, as is often done when working in a free form. Serialism, therefore, is the epitome of what is sometimes called the inorganic approach to composition as opposed to organic development.

By denying or ignoring the existence of either symbolic meaning or emotive expression, the serialists are in danger of descending, or perhaps in this case ascending, to the utterly meaningless. Unquestionably the imposition of an assigned or specific meaning would inhibit the appreciation of the music itself, but this need not prohibit those indefinite and flexible connotations which cannot be particularized. Indeed, this very flexibility of connotation is an inherent virtue; it is this quality, in the opinion of Leonard B. Meyer, that "enables music to express what might be called the disembodied essence of myth, the essence of experiences which are central to and vital in human existence."\textsuperscript{18}

It is an evasion to imply, as many do, that neither the intent, the method nor the approach to composition is important—that what matters is the work created. The simple logical law of

\textsuperscript{17}For a detailed examination of this genus of musical thought consult Susanne Langer's \textit{Philosophy in a New Key}, pp. 236-37, in which she draws the cogent conclusion: "They are suddenly faced with the dichotomy: significant or meaningless. And while they fiercely repudiate that music is a semantic, they cannot assert that it is meaningless."

\textsuperscript{18}Meyer, \textit{op. cit.}, p. 265.
cause and effect refutes this theory. Moreover, the purpose here is not to prove that the application of the serial concept produces a work that is simply unsuccessful; it is rather to determine whether the work produced lies within or beyond the sphere of art. And in this regard the intent of the composer is a determining factor.\textsuperscript{19} If art is an abstract expression of feeling,\textsuperscript{20} then obviously we have the right to expect the composer to concern himself with the articulation of an artistic form of some significance. Technique in itself is not art; the basic error of the serial composer is to mistake the means for the end.

The serial concept, by discarding the whole emotive-content idea in favor of an over-intellectual and pedantic approach, is accordingly incapable of creating an art form of symbolic or expressive meaning. Not only is it essentially unconcerned with the communication of feeling—its highly refined and austere structural patterns stifle any feeling which the composer might conceivably wish to express. Although many composers find parts of the serial technique useful, extended serialism is employed all too frequently as a substitute for imagination; it becomes an academic exercise wholly immersed in its own systematized preciousness. The trend in many quarters toward total serialization can lead only to ultimate artistic sterility.

\textsuperscript{19} For a general account of the importance of artistic intent see Susanne Langer, \textit{Problems of Art}, p. 109.
\textsuperscript{20} Above, p. 36.
SOME ASPECTS
OF
DUTCH IMMIGRATION
TO
CANADA SINCE 1945

Anthony Sas

In the Netherlands—a country with a high birth rate and limited amount of land—emigration of the surplus population which cannot find adequate employment has been necessary and important ever since the end of the Second World War. Consequently between 1945 and 1956 nearly 250,000 Dutch have settled permanently in overseas countries, with Canada receiving close to 110,000 of the migrants—a total unprecedented in the history of the population movement between the two countries. Faced with a surplus of agricultural and skilled workers the Dutch Government, throughout the post-war decade, has encouraged and actively assisted in the emigration of Netherlanders. In doing so it has followed a liberal course, refraining from applying pressure and adhering closely to the principle that migration is a voluntary act on the part of the individual. Besides centralizing emigration in the “Netherlands Emigration Society” the migrants received from the Government the fullest possible technical and financial aid and were liberally assisted in their passage.

Canada’s dominant position as immigration country has been the result of several factors, the outstanding one being the great demand for labor. The war economy had initiated a considerable industrialization in Canada and the manufacturing capacity thus
created remained intact, even expanded, after the war. This development had caused an increasing number of rural workers to leave for industrialized urban regions and this in turn resulted in a strain upon certain agricultural sections of the country as far as labor was concerned. This need for workers in those rural regions has governed primarily the destination of Dutch immigrants during the first years of the post-war decade, and although the number of immigrants having other occupations has recently surpassed that of the agrarians, the immigration of the latter is the basis upon which rests the migratory movement of Dutch to Canada.

Rather than single persons, it was primarily families who migrated. During the post-war period the number of single males emigrating to Canada amounted to less than 10 per cent of the total number of migrating units, and in many instances they proved to be the forerunners of the rest of the family. Relatively seldom did it happen that the head of the household migrated alone, but if he did, other members usually followed within a short period of time. This decided family character of the population movement is indicated by the fact that about 60 per cent of all immigrants consisted of dependent wives and children. In many cases the size of Dutch families has been large, ten or more members not being exceptional. A near-record was established in 1956 when a book dealer and his wife arrived in London, Ontario, accompanied by their 18 children.

The majority of the immigrants arrived as sponsored cases. Under this system someone living in Canada—either a relative, friend, or Canadian—guaranteed employment and living accommodation for the immigrant and his family for a certain length of time, usually one year, after which period the settler could seek employment and residence elsewhere in the country. These arrangements were not strictly binding, however, and often were entered into as gentlemen agreements to be terminated by mutual consent if circumstances called for it.
As a rule this arrangement has worked to the satisfaction of both employer and immigrant-employee; especially for the latter it often proved beneficial in that he was given an opportunity to get acquainted with Canadian ways of life, while the Canadian, and particularly the farmer, was able to learn about certain Dutch agricultural techniques which aided him in improving his land and crop. There is no doubt that this sponsorship-system will continue to form an integral part of the Canadian immigration policy, as it provides certain safeguards against the entrance of adventurers or the economically irresponsible.

The presence of relatives or friends in Canada has had a great effect upon the ultimate destination of the immigrants. The human trait of people who, when moving to an alien environment, prefer to be close to those whom they knew in the homeland has also come to the fore in cases of immigrants sponsored by Canadians. Many have been the families which, upon completion of the arrangement with their sponsor and despite the fact that they might suffer economic setbacks, moved to those parts of Canada where relatives or friends had settled in the meantime. This trend, in addition to the sponsored relative migration, has contributed to the creation of definite concentrations of Dutch in several provinces.

The founding of churches of several religious denominations with which the immigrants were affiliated in the Netherlands and which often became nuclei for Dutch settlements in Canada has been another factor in the distribution and concentration of the settlers in certain regions of the country. In this respect mention must be made of the widespread establishment of Christian Reformed (Orthodox Protestant) churches—particularly in Ontario and the Western Provinces—and the activities by leaders of other faiths. Also the work of the so-called “fieldmen”—sent to the Netherlands at regular intervals under auspices of certain church organizations to establish contact with prospective immigrants—
has had positive effects, particularly among the Christian Reformed and, of late, the Roman Catholics.

Besides these more or less personal factors which have to a degree guided the post-war distribution of Dutch immigrants, economic-geographic as well as cultural conditions in Canada have been additional determinants in producing the present settlement pattern. Relatively few of the migrants have moved into the Maritime Provinces and Quebec. In these parts economic conditions have been less favorable than elsewhere in the country; moreover, the French influence has possibly been a deterrent to large-scale Dutch settlement in these Provinces. Furthermore, the Dutch—particularly the agriculturalist—has seldom ventured into the northern parts of Canada—the fringe regions—where land has to be cleared, great risks with a limited amount of capital have to be taken, and a rigorous climate has to be mastered. In other words, the overwhelming majority of Dutch farmers have thus far not pioneered, have not been instrumental in helping to push the frontier further north. Of course there have been exceptions: the Cochrane development in Northeastern Ontario; certain settlements in Central British Columbia; and those in the Peace River District in Northern Alberta. But these have, at least until the present, remained rather limited in scope.

Where, then, in Canada did the Dutch immigrants settle primarily? Although they settled in all Provinces and Territories, three regions have emerged where, thus far, significant concentrations have formed: Southern Ontario, Southern and Central Alberta, and Southwestern British Columbia. These three regions combined have absorbed about 80 per cent of the post-war settlers.

Based on historic precedent, demand for labor, church activities and various personal reasons, the most prominent of these concentrations has developed in the Southern part of Ontario. In general, it might be said that nearly 50 per cent of all Dutch immigrants to Canada have settled south of a line drawn from
Owen Sound to Pembroke, with most of them residing in the southwestern part of the Province, the Niagara Peninsula, and the Toronto Metropolitan area.

Prior to 1951, the majority of the migrants moved into rural southwestern Ontario—one of the outstanding agricultural regions in Canada—and along the Upper St. Lawrence River. But when it became possible for non-agrarians to enter the country on a large scale, the Toronto-Hamilton industrial region has claimed a considerable share of the new arrivals, with Toronto absorbing more than any other city in the country. The second concentration is in the Province of Alberta where the Dutch have settled the relatively flat areas between the international border and Edmonton. Many immigrants have moved near and into the larger urban centers such as Calgary, Lethbridge and Edmonton, but they are also found in rural areas close to the border.

Southwestern British Columbia has also absorbed many thousands of Dutch with a decided concentration in the so-called Lower Mainland area including the urban, industrialized centers of Vancouver and New Westminster. Extensive rural settlement has taken place in the valley of the Fraser River eastward as far as the Okanagan River.

In addition to these three regions, numerous centers of Dutch settlement have sprung up throughout Canada, but thus far they have remained limited to major cities and well-populated rural regions—in general following closely the existing pattern of the country's population.

General or mixed farming, horticulture, and dairying are the primary occupations of those Dutch who have settled in rural regions and close to urban centers, while the immigrants who reside in the cities are mainly engaged in clerical, skilled industrial, and domestic work.

In general, the Dutch immigrant has been well received in Canada and he has been able to make a successful adaptation to
his adopted country. Statistics over a ten year period indicate that out of a total number of immigrants less than 1 per cent has returned to the Netherlands.
ACTION RESEARCH IN
A PROGRAM OF
PHYSICAL EDUCATION

CAROLINE B. SINCLAIR

I. BACKGROUND OF STUDIES

Following two years of intensive study, the general education program in physical education for the women students of Madison College was revised in 1960. In addition to the essential benefits previously offered, the revised program was designed to provide more adequately for the varying needs of individual students, to offer greater depth in experience, to put emphasis on activities of a more vigorous nature, and to make possible more efficient administration.

It is the purpose of this paper to cite some of the data on which the revision was based, to present results of tests given as a part of the revised program, and to examine the findings of other studies which appear to have significant implications for the further evaluation and revision of the college program. These efforts in action research will be continued. Additional studies are already under way, and others are planned for the future.

In the fall of 1960-61, a two-year program including the following was inaugurated:

1. One semester of dance to include dance fundamentals and dance experience in folk and modern.
2. One semester of swimming to include security skills and knowledge, and swimming and diving proficiency.
3. One sport (eight weeks) at the intermediate level (defined as reasonable progress over two seasons of the sport). This
is combined with a variety of other indoor-outdoor activities to constitute a semester course.

4. The fourth semester of work to be freely elected unless in the tests given at entrance a student proves deficient in body mechanics (posture grade below C—and/or MAPF Score below 194). In this case the student is required to take one semester of movement fundamentals.

Students who can not qualify for a sports class at the intermediate level may elect a preliminary class at the elementary level in preparation.

II. THE TESTING PROGRAM

1. The Motor Ability Physical Fitness Test

Preliminary to the inauguration of the new program, a five-item battery of tests was selected for all entering students. This battery includes three motor ability items (obstacle race, basketball throw, and standing broad jump) and two physical fitness items (chair stepping and sit-ups). This combination is known as the Motor Ability-Physical Fitness Test (MAPF).

Tests were administered to first-year students in 1959, and a T-Scale was established from the scores. This scale has been used in evaluating performance of entering students for 1960 and 1961.

2. The Body Mechanics Screening Test and Follow-Up

Because of time limitations, Lowman’s method of group evaluation of body mechanics was substituted for the individual method used prior to 1960.

3. Medical Problems

The department consults with the College Physician about all students requiring restriction or modification of activity because of medical problems.

4. Proficiency Tests

Proficiency tests have been established for dance, swimming, and the intermediate level of all sports provided in the Madison Program. In some cases standardized tests are used; in others, members of the faculty have constructed tests for use at Madison.

These tests are given at regular intervals; when students meet the established standards, they may exempt the required courses and elect others of their own choice.

III. EXPERIENCE OF ENTERING STUDENTS

Data collected from entering students of 1954-60 and studies made by Myers and Sinclair of the entering class of 1959 indicate that 80 per cent of the students had participated in physical education classes for at least three years in high school; more than half of the students reported class work for four or five years. In 1960 and 1961 the number of entering students with more than three years dropped to 44 per cent and 3.6 per cent respectively, but the percentage of students with less than three years also decreased. There is some evidence that the three-year program is gradually becoming standard in the Virginia schools.

The author studied the MAPF scores in relation to the extent of the high school experiences. Data for 1960 and 1961 are given in Table I. There is a clear indication that each additional year of physical education tends to be associated with a higher MAPF score. Myers' data are in close agreement with those compiled by the author and others who studied the classification cards of 517 students entering Madison College in 1959 (non-Virginia students included). More than 50 per cent (260) reported four or five years of physical education in high school but 103, or 20 per cent, reported less than three years. Seventy-six per cent

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claimed skill of moderate degree or better in basketball, 71 per cent in softball, and 85 per cent in volleyball.

Many studies have indicated a leveling off point in physical performance for women and girls at 13.5 years of age. Data in Table I and some of those which follow seem to indicate that gains are demonstrated when practice is continued.

Of the various activities in high school the students reported most experience and a higher degree of skill in volleyball, softball and basketball. No experience in these sports was reported by only 2, 5, and 6 per cent respectively in 1959. Moderate or better skill was claimed in each of these activities by at least 71 per cent of the high school graduates entering Madison.

### TABLE I

MAPF Scores of Entering Women Students
According to Years of Physical Education in High School

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>5 years or more</td>
<td>64</td>
<td>67</td>
<td>260.03</td>
<td>261.00</td>
<td>14.08</td>
<td>16.80</td>
</tr>
<tr>
<td>4 years</td>
<td>169</td>
<td>120</td>
<td>245.95</td>
<td>244.20</td>
<td>7.15</td>
<td>7.96</td>
</tr>
<tr>
<td>3 years</td>
<td>195</td>
<td>230</td>
<td>238.80</td>
<td>236.24</td>
<td>10.55</td>
<td>10.99</td>
</tr>
<tr>
<td>2 years</td>
<td>65</td>
<td>74</td>
<td>228.25</td>
<td>225.25</td>
<td>4.85</td>
<td>3.25</td>
</tr>
<tr>
<td>1 year</td>
<td>9</td>
<td>5</td>
<td>223.40</td>
<td>228.00</td>
<td>12.85</td>
<td>5.00</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>20</td>
<td>5</td>
<td>210.55</td>
<td>223.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inc. Info</td>
<td>8</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>530</td>
<td>519</td>
<td>49.48</td>
<td>37.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mm</td>
<td>231.14</td>
<td>238.77</td>
<td>9.90</td>
<td>7.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### IV. STUDIES OF THE REVISED PROGRAM

**Eight-Week Gains in Physical Fitness**

Results of re-testing with the fitness items of the MAPF battery in five different activities are presented in Table II. Tests

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were given in September and repeated after eight weeks of instruction. Table III summarizes the gains cited in Table II.

TABLE II
GAINS IN PHYSICAL FITNESS IN EIGHT WEEKS

<table>
<thead>
<tr>
<th>Activity</th>
<th>No.</th>
<th>1st MnT Score</th>
<th>2nd MnT Score</th>
<th>Gain Score</th>
<th>1st MnT Score</th>
<th>2nd MnT Score</th>
<th>Gain Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals</td>
<td>12</td>
<td>41.27</td>
<td>50.50</td>
<td>9.23</td>
<td>42.08</td>
<td>50.83</td>
<td>8.75</td>
</tr>
<tr>
<td>Ele. Hockey</td>
<td>74</td>
<td>49.92</td>
<td>57.83</td>
<td>7.91</td>
<td>52.62</td>
<td>55.54</td>
<td>2.92</td>
</tr>
<tr>
<td>Ele. Tennis</td>
<td>29</td>
<td>47.86</td>
<td>56.17</td>
<td>8.31</td>
<td>53.65</td>
<td>54.37</td>
<td>0.72</td>
</tr>
<tr>
<td>Ele. Dance</td>
<td>26</td>
<td>50.73</td>
<td>53.60</td>
<td>2.87</td>
<td>53.80</td>
<td>52.38</td>
<td>-1.42</td>
</tr>
<tr>
<td>Ele. Swim</td>
<td>24</td>
<td>49.91</td>
<td>53.45</td>
<td>3.54</td>
<td>50.70</td>
<td>52.54</td>
<td>1.84</td>
</tr>
</tbody>
</table>

TABLE III
GAINS IN PHYSICAL FITNESS MADE IN VARIOUS ACTIVITIES IN 8 WEEKS

<table>
<thead>
<tr>
<th>Activity</th>
<th>No.</th>
<th>Total PF 1st test</th>
<th>Total PF 2nd test</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals</td>
<td>12</td>
<td>83.50</td>
<td>101.16</td>
<td>17.66</td>
</tr>
<tr>
<td>Ele. Hockey</td>
<td>74</td>
<td>101.75</td>
<td>113.61</td>
<td>11.86</td>
</tr>
<tr>
<td>Ele. Tennis</td>
<td>29</td>
<td>102.14</td>
<td>110.08</td>
<td>7.94</td>
</tr>
<tr>
<td>Ele. Dance</td>
<td>26</td>
<td>104.56</td>
<td>106.18</td>
<td>1.61</td>
</tr>
<tr>
<td>Ele. Swimming</td>
<td>24</td>
<td>100.74</td>
<td>106.16</td>
<td>5.42</td>
</tr>
<tr>
<td>Total Gain</td>
<td></td>
<td></td>
<td></td>
<td>44.49</td>
</tr>
<tr>
<td>Mean Gain</td>
<td></td>
<td></td>
<td></td>
<td>8.90</td>
</tr>
</tbody>
</table>

There is a consistent gain in physical fitness in the eight-week period varying from 1.61 in dance to 17.66 in fundamentals. In the latter class, strength and endurance were major objectives, and much emphasis was placed on strengthening the abdominal muscles in which Table II shows a gain of 8.75. The gain in leg strength and endurance as tested by the chair step was slightly larger—9.23.
Semester (16 weeks) Gains in Motor Ability and Physical Fitness

Thirty-two students in fundamentals classes and one hundred students in elementary dance were tested on all battery items at the end of sixteen weeks (1960-1961). The results are given in Tables IV and V.

### Table IV
**Gains in MAPF in 16 Weeks of Fundamentals**

| Motor Ability Items | MnT Score 1st test | MnT Score 2nd test | Gain  
|---------------------|-------------------|-------------------|------
| Basketball Throw    | 38.48             | 48.04             | 9.56 |
| Broad Jump          | 39.81             | 47.45             | 7.64 |
| Obstacle Race       | 30.36             | 38.79             | 8.43 |
| Total               | 108.65            | 134.28            | 25.63|
| Mean                | 36.22             | 44.56             | 8.55 |

**Physical Fitness Items**

| Chair Step          | 41.84             | 54.74             | 12.90|
| Sit-ups             | 36.50             | 55.40             | 18.90|
| Total               | 78.34             | 110.14            | 31.80|
| Mean                | 39.17             | 55.07             | 15.90|
| Total Battery       | 186.99            | 244.42            | 57.43|
| Mn                  | 37.40             | 48.88             | 11.49|
| N                   | 32                |                   |      |

### Table V
**Gains in MAPF in 16 Weeks of Elementary Dance**

| Motor Ability Items | 1st test | 2nd test | Gain  
|---------------------|----------|----------|------
| Basketball Throw    | 48.52    | 53.05    | 4.53 |
| Broad Jump          | 51.62    | 55.11    | 3.49 |
| Obstacle Race       | 42.09    | 50.73    | 7.64 |
| Total               | 142.23   | 158.89   | 16.66|

**Physical Fitness Items**

| Chair Step          | 48.78    | 60.13    | 11.35|
| Sit-ups             | 54.63    | 63.41    | 8.78 |
| Total               | 103.41   | 123.54   | 20.13|
| Total Battery       | 245.64   | 282.43   | 36.79|
| Mean Gain           |         |          | 7.40 |
| N                   | 100      |          |      |
Other sixteen-week scores available are for fundamentals (Table IV). The students had a mean T-score of only 37.40 at the beginning of the term and were enrolled in this class with the specific purpose of improving physical fitness and fundamental motor skills. The mean gain in physical fitness was almost twice that for motor ability and the mean total gain of 11.49 was distributed in a range of 7.64 (broad jump) to 18.90 (sit-ups) over the five items of the battery. Note that Table II shows marked improvement in chair steps after the first eight weeks while the gain in the second eight weeks was only 40 per cent of that made in the first; gain in sit-up scores was continuous throughout the 16 weeks with the larger gain appearing in the second eight weeks. Final attainments in the two items were comparable with a mean T-score of 54.74 and 55.90 respectively (Table IV).

V. MAPF GAINS AFTER 3.5 SEMESTERS OF THE OLD PROGRAM

Dean and Quist\textsuperscript{4} tested one hundred second year students in May 1961 after their participation in 3.5 semesters of physical education under the old plan (see p. 1). Their purpose was to compare results with those obtained in the new program. The MAPF Test was used and findings are presented in Table VI. The mean gain in physical fitness of 3.76 is much less than that for either of the sixteen-week groups for whom scores with the new program are available. The physical fitness gain is exceeded by two of the eight-week groups—fundamentals and elementary hockey. The marked difference in gains in chair steps (9.41) and sit-ups (.60) supports the claims of many observers that special attention must be given to the abdominal muscles if strength is to be improved and maintained. The considerable gain in chair-steps attests to the continued vigorous use of the legs throughout a varied program.

VI. EXTRA CLASS PARTICIPATION IN PHYSICAL ACTIVITY

In 1961, McSweeney made a study of selected Madison students from the four classes in order to ascertain the relationship between extracurricular participation in physical activities in high school and in college. Her studies examined the experiences and attitudes of Madison College students from six selected communities. Some of her findings have curricular significance. She concluded that:

1. Extracurricular participation is decreasing in high schools;
2. Extracurricular participation is decreasing in college;
3. The greater the number of years of physical education in high school the greater the extracurricular participation in high school and college.

### TABLE VI
GAINS IN MAPF SCORES AFTER 3.5 SEMESTERS OF PHYSICAL EDUCATION BEFORE THE REVISED PROGRAM

<table>
<thead>
<tr>
<th>Motor Ability</th>
<th>Mean T. Score Fall, 1959</th>
<th>Mean T. Score Spring, 1961</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball Throw</td>
<td>51.20</td>
<td>53.57</td>
<td>2.37</td>
</tr>
<tr>
<td>Broad Jump</td>
<td>51.55</td>
<td>54.55</td>
<td>3.00</td>
</tr>
<tr>
<td>Obstacle Race</td>
<td>50.98</td>
<td>52.88</td>
<td>1.90</td>
</tr>
<tr>
<td>Total</td>
<td>153.73</td>
<td>161.00</td>
<td>7.27</td>
</tr>
<tr>
<td>Mn.</td>
<td>51.24</td>
<td>53.67</td>
<td>2.42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Fitness</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair Step</td>
<td>51.15</td>
<td>60.56</td>
<td>9.41</td>
</tr>
<tr>
<td>Sit-ups</td>
<td>51.18</td>
<td>51.78</td>
<td>.60</td>
</tr>
<tr>
<td>Total</td>
<td>102.33</td>
<td>112.34</td>
<td>10.01</td>
</tr>
<tr>
<td>Mn.</td>
<td>51.17</td>
<td>56.17</td>
<td>5.05</td>
</tr>
</tbody>
</table>

| Total Battery         | 256.06                   | 273.34                     | 17.28|
| Mn.                   | 51.21                    | 54.67                      | 3.76 |

4. Probability of participation at the college level is much greater if the student participated in high school sports.

5. Students tend to participate in those activities which they had in high school, but some will choose new activities, especially swimming, bowling, and archery.

VII. SUMMARY OF THE FINDINGS

The studies and data presented may be summarized as follows:

1. Entering students at Madison consider themselves best qualified in basketball, softball, and volleyball.

2. Between 1959 and 1961 there was a sharp drop in the length of the high school program represented by Madison students.

3. From 1959-61 the percentage of students with less than three years of physical education dropped from 20 per cent to 16 per cent.

4. In 1960 and 1961 entering students sustained a mean MAPF Score consistent with the number of years of high school participation in physical education.

5. At Madison, gains in physical fitness occurred consistently after eight weeks of class work in fundamentals, elementary hockey, elementary tennis, elementary swimming, and dance. The gain is in the order given.

6. The gain was marked by greater increase in chair-stepping over sit-ups for all groups except fundamentals, for which they were about the same.

7. Gains in physical fitness items occurred to a greater degree in sixteen weeks than in eight in both dance and fundamentals (the only two activities for which sixteen-week scores are available).
8. Consistent gains were evidenced in the three motor ability items after sixteen weeks of dance and fundamentals.

9. After 3.5 semesters of the old program students scored a gain below the gains of students in the revised program except for the chair-stepping in which the score was superior to all eight-week groups but inferior to those of the sixteen-week group.

10. There is evidence that extracurricular participation in physical activities is decreasing in both high school and college.

11. McSweeney's study shows that students participating in extracurricular activities in high school are more likely to participate in physical activities in college.
The first white settlers in the Great Valley of Virginia and the adjoining sections of West Virginia came from the Palatinate region of Germany by way of Pennsylvania. The migration of Germans, from their area of first settlement in southeastern Pennsylvania, made the Shenandoah Valley virtually a southern counterpart of the so-called "Pennsylvania Dutch Country."

From 1726 when Adam Miller, the first white settler, arrived in the Valley, a migration pattern was established and by the time of the War of the Revolution a large portion of the population in Rockingham, Shenandoah, Augusta and Page counties in Virginia were migrants from Pennsylvania. The population of Pendleton and Hardy counties in West Virginia were also part of the same migration pattern with the result that the region perpetuated the cultural and social characteristics which have been popularly associated with the Pennsylvania Germans.

The settlers in the Shenandoah Valley used the German language in their religious activities and spoke the Pennsylvania Dutch dialect in their homes and in their neighborhood affairs. They consulted the almanac before engaging in many of the necessary agrarian tasks, for they placed great faith in the signs of the Zodiac and the moon. Like their Pennsylvania counterparts, they observed any number of customs associated with special days,
such as Shrove Tuesday, Ash Wednesday, Maundy Thursday, Ascension Day and even May Day. They enjoyed social activities similar to their forefathers in the Palatinate, and they cared for the sick with the old time cures, remedies, and treatments. They also feared witches and human beings who were believed to be able to put spells on cattle and even children.

The religious affiliation of the Valley Germans is almost as diverse as it is in Pennsylvania, for there are congregations of Amish, Beachy Amish, Conservative Mennonites, Old Order Mennonites and Brethren in Christ as well as the major church groups such as the Mennonite Church, Evangelical United Brethren, Church of the Brethren, Reformed and Lutheran.

The writers have interviewed more than a hundred elderly persons of German ancestry in six counties of the Valley. It has been found that vestiges of many of the traditional German beliefs, customs and practices still persist.

In 1907, Dr. John Wayland, an eminent Valley historian, observed the gradual and steady decline of the German language and predicted, "Another generation or two will almost certainly witness its utter extinction."1 H. M. Hays, of the University of Virginia, also predicted the demise of the dialect in the Valley.2 By 1927, Wayland wrote, "... it was a rare thing to hear a German word spoken."3 Nevertheless, the dialect is still spoken by hundreds of people in the Valley in 1963. Dr. Ellsworth Kyger, Professor of German at Bridgewater College, has tape-recorded a number of German dialect passages from people now living in the Valley and has a list of more than a hundred and fifty dialect-speaking residents. The writers have also recorded dialect speakers in five counties. It would be a conservative estimate to claim that at least seven hundred people can speak or understand the

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1 John Wayland, The German Element of the Shenandoah Valley of Virginia (Charlottesville, Va., 1907), p. 102.
2 H. M. Hays, Dialect Notes, III (1908), 264 ff.
dialect today! It would, however, be unrealistic to assume that the dialect will persist in any meaningful form for many more years because it is now almost totally restricted to isolated areas and spoken mostly by older people.

Large numbers of the older rural farming population of the Valley still obtain copies of Gruber’s *Almanac.* Although many of the people still believe “there’s something in the influence of the moon,” some of them are inclined to ridicule the use of the “signs.” Quite often they tell us, “We plant in the ground, not in the signs!” Nevertheless, any number of women claimed that “if you plant cucumbers or squash in the sign of Poseywoman (Virgo), you will get blossoms but not much fruit” and that “if you shingle a roof in the up signs of the moon the shingles will curl up.” Some few people place much greater emphasis on the signs, awaiting the proper ones to make saurkraut, prune shrubs, butcher, cut timber, and even cut hair.

Any number of people in the Valley remember the dialect rhyme about the Zodiac signs. One of the several versions is:

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Der Widder dere shtashed
De Kinner sin base
Der Laeb dere brilled
Der Woak de guild
Der Fish dere shwimmed
Der Shta buck shpringed
Der Shitz dere sheesed
Der Shteribyen shtiched.
Der Wasser man gessed
Der Yung Frau shpriched
Der Grebs der glammed
Der Shtere dere rand.
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Some of the residents still sprinkle ashes on their cattle on Ash Wednesday morning in order to keep lice away; make fried

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4J. Gruber Almanack Company, Hagerstown, Maryland.
cakes on Shrove Tuesday; gather and eat dandelions on Maundy Thursday; and refuse to sew or plant anything in the ground on Ascension Day for fear that lightning will strike their houses or heavy rains wash away their gardens. Some people remember that their parents or grandparents believed that freckles could be removed on the first day of May if the freckled person would get up before sunrise and wash his face in the early morning dew before speaking any words that day.

Older residents recall with pleasure the days when they spent almost every evening during the Christmas holidays belsnickeling with their neighbors. In some neighborhoods, people still visit friends and relatives dressed up in costumes with masks over their faces just as they did in the Palatinate hundreds of years ago. (In mid-December of 1962 a seventy-year-old male resident of Augusta county displayed for the writers the new mask he planned to wear belsnickeling during the coming holiday season.)

Although the custom of “shooting in the New Year” is only a memory, some elderly residents still remember when groups of men arrived at their homes in the wee hours of the morning to read the “greeting” and shoot their muskets. Three different versions of New Year verses have been collected and one woman could still remember and recite the “wish” her grandfather gave his neighbors each year—in English and in the dialect. The first two verses follow:

Awake, Awake, My neighbors dear,
And to my Wish prolonging year,
The New Year is now at the door,
The old one’s past and comes no more.

I wish to you a happy year,
That from bad luck you may be clear,
You and your family and all the rest,
May with content be ever blessed.
Barn decorations or “Hex signs” are a unique feature on many of the barns in some Pennsylvania Dutch counties. These geometric designs are often painted in several colors and in a wide variety of patterns. In the Shenandoah Valley such barn decorations are much less common. Decorations include stars, circles, horses and even a bird, but they are almost always painted in a single color and are applied for decoration rather than as protection from witches.

Cures, remedies and treatments of every form are still used by rural farm women throughout the Valley area. More than twenty elderly women have given the writers explicit instructions on how to “measure” children who are believed to be suffering from “undergrowth,” and as many knew how to “grease” for the condition known as “liver-grown.” More than thirty different teas have been recommended for various ailments, the more popular ones being Boneset, Rue, Sage, Thyme, Peppermint, Sassafras, Pennyroyal, Queen Anne’s Lace, Elderberry, Blood Root, Wild Strawberry leaves, Snake Root, Red Clover, Pipsissewa, Catnip and Burdock, none of which call for a trip to the drug store, but instead a walk through the fields, meadow, creek side or mountains.  

Occult cures can also be found in the Valley. Children were placed in the grain hopper of the mill to prevent whooping cough; or passed through a horse collar three times as a cure for colic; or a straw, fresh from the stable, was waved in the open mouth of a child who had a sore throat. Sometimes people with special “supernatural” powers were called to “say words” which were supposed to cure ailments of both man and beast. Several different informants knew the special words and hand motions used to cure sweeny (See G. dial. Schweine) in a horse, they are:

5Paul Wieand, Folk Medicine Plants of the Pennsylvania Dutch (Allentown, Pa., 1961), pp. 3-7.
Swainee, I want you to leave
Out of the marrow into the bone
Out of the bone into the flesh
Out of the flesh into the hide
Out of the hide into the hair
Out of the hair into three-quarters of the earth
In the Name of the Father, Son and Holy Ghost.

Some of our older residents can recall when certain individuals in their neighborhood were believed to be witches. People feared them and even claimed that they had put a spell on their cattle, made the cows’ milk blood streaked or the cream impossible to transform into butter. They were thought to be able to cause sickness in both human beings and livestock.

The information for this article has been obtained almost exclusively from interviews with elderly people who often glory in the past and honor yesterday more than today. It must be stated that there has been a marked tendency away from these old customs, beliefs and practices; and, in the near future, the dialect, superstitions, folk medicine, occult cures and special holiday observances will have become extinct in the Valley, just as they are fading from practice in the northern Pennsylvania Dutch country.
The purpose of this study was to gather information concerning foreign language programs in the public elementary schools in Virginia during the 1959-60 school year and to evaluate these programs in light of certain criteria. The criteria were based upon research findings, acceptable theory, and good school practice.

The procedures used in conducting the study were as follows: (1) a survey was made of all local school superintendents in Virginia for the purpose of locating elementary schools that offered instruction in foreign languages, (2) a questionnaire was sent to all schools found to be offering a second language, (3) visits were made to selected schools for the purpose of interviewing principals and gathering descriptive data not easily obtainable from the questionnaire, (4) criteria for evaluating foreign language programs in elementary schools were developed, and (5) an evaluation was made of the foreign language programs found in the Virginia elementary schools.

Status of foreign language programs in Virginia elementary schools. It was found for the 1959-60 school year that 131 elementary schools located in eighteen different school systems were offering some type of foreign language instruction. One

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1This article is based upon the author's doctoral dissertation entitled "A Study of Foreign Language Instruction in the Public Elementary Schools of Virginia, 1959-60," School of Education, University of Virginia, 1962.
hundred and four of these schools responded to the survey and enrolled a total of 10,628 pupils in foreign language classes. Most of these children were in grades four, five, and six. The purpose of most foreign language programs was to promote competence in the second language. Many schools reported, however, that their foreign language program was designed to develop understanding of foreign people.

Most schools provided a thirty-minute class period two or three days a week. Generally, pupils were selected on the basis of regular class groups, although some schools considered interest and academic ability. Financial support for most programs came from the local school boards; however, other sources of financial support were fees paid by pupils, funds raised by individual schools, and in one system, assistance from a foundation.

Some foreign language teachers were well qualified and fully certified, whereas others had little preparation and were not certified. College students acted as the teachers in a few schools. Supervision was generally performed by the principal, elementary supervisor, or by a special foreign language supervisor. A few teachers had attended foreign language workshops, and many others were interested in improving their competence in such in-service activity.

The aural-oral method was used in most schools with a predominance of listening, conversation, imitation, and memory work. Forty schools in six systems were participating in televised foreign language programs from four different stations. The types of equipment most frequently used were the phonograph, tape recorder, and television receiver. The most helpful materials were pictures, recordings, objects, and courses of study. The most significant problems reported were the crowded curriculum and the shortage of qualified teachers. Most principals indicated plans for continuing foreign language instruction and about half of the respondents planned to expand their programs the following year.
Evaluation of foreign language programs in the Virginia elementary schools. Criteria for evaluating foreign language programs in elementary schools were based upon reports of research, acceptable theory, and good school practice. The criteria, stated as principles, covered the following aspects of foreign language programs: (1) purposes or objectives, (2) organization and administration, (3) instruction and supervision, (4) materials and equipment, and (5) evaluation. The principles were developed as follows:

I. The purposes or objectives of the elementary school foreign language program should be the result of cooperative study and planning.

II. The purposes or objectives should be stated as desirable changes in the behavior of pupils, setting forth specific learning outcomes as the desired results of instruction.

III. The purposes of foreign language instruction in the elementary grades should be possible of attainment with an economy of time and effort.

IV. A program of foreign language instruction in the elementary grades should bear the approval and support of the local board of education.

V. Foreign language instruction in the elementary grades should derive its financial support from the local board of education or from sources approved by the board which do not infringe upon the responsibilities and control of the board.

VI. The cultural backgrounds and the interests found in the community should be considered when a second language is selected.

VII. The foreign language program should provide for close articulation between the elementary and secondary levels.
VIII. Foreign language classes in the elementary grades should be held daily for pupils beginning the second language.

IX. The length of class periods should conform to the attention span of the pupils.

X. Teachers of foreign languages to elementary school pupils should be fluent in the second language and possess a native-like accent.

XI. Foreign language teachers in elementary schools should be competent in methodology suitable for teaching children in the elementary grades.

XII. The method used in teaching a second language to elementary school pupils should stress the aural-oral approach, using the target language almost exclusively.

XIII. Instruction in a second language should be direct and specific, not incidental to other school activities.

XIV. The foreign language program should be supervised by personnel who understand the general purposes of the elementary school, the nature of the pupil as a learner, effective methods for teaching a second language to children, and who possess skill in educational leadership.

XV. Pupils in foreign language classes should be selected on the basis of interest and ability to learn a second language.

XVI. Effective in-service educational activities concerned with improving instruction in foreign languages should be developed by the instructional and supervisory staff.

XVII. When foreign language instruction is televised, effective preparation and follow-up for each lesson should be provided by the classroom teacher.
XVIII. Provision for the individual differences of pupils in the foreign language class should be included in the instructional program.

XIX. Personnel responsible for the foreign language program in the elementary grades should know the various sources of materials and equipment and how to use them effectively.

XX. Materials and equipment should be selected for the purpose of improving the effectiveness of instruction and so evaluated in order to avoid cluttering the instructional scene with non-essentials.

XXI. A course of study should be used that provides for the sequential development of auditory and pronunciation skills, the development of concepts based upon true referents rather than native language symbols, and the development of a controlled vocabulary that is both useful and meaningful in the experiences of the pupils.

XXII. Plans for evaluating pupil achievement in foreign language learning should be developed when the program is initiated and continually improved.

XXIII. Evaluation should be in terms of the objectives given for the foreign language program.

XXIV. Evaluation should be continuous so that the teacher and pupils are aware of progress.

XXV. Evaluation should be comprehensive, covering such areas as aural comprehension, oral skills, vocabulary, and in later grades, reading, spelling, composition, and other areas included in the objectives.

XXVI. Evaluation should result in improved instruction in each class and improved articulation between grades or levels.
The foreign language program in the public elementary schools in Virginia was evaluated in light of the previously stated principles. Both favorable and unfavorable characteristics were found in the Virginia programs.

Favorable aspects included the following: (1) a well planned program, adequately financed, properly executed, with well qualified teachers found in one system, (2) workshops and conferences provided by three systems, (3) televised instruction in a foreign language available from four stations, (4) many pupils learning a second language, and (5) interest high among many teachers and principals.

Unfavorable features of second language programs included (1) apparent lack of long-range planning, (2) inadequately prepared teachers, (3) materials and equipment unavailable in many schools, (4) continuity through the grades often not provided, and (5) the need for much more leadership at the local and State levels.

CONCLUSIONS

The survey and appraisal of foreign language programs in Virginia elementary schools has provided the basis for several conclusions. The first conclusion concerned the place of foreign language instruction in the elementary curriculum. In Virginia and across the nation many elementary schools have added foreign language instruction in recent years. There are few reports, however, of schools dropping foreign language subjects from the curriculum. The result is crowding an already full program. There is great need for a re-evaluation of the elementary curriculum in an attempt to establish priority ranking for the various items found in the elementary school program.

A second conclusion warranted by the study is that local boards of education should be concerned with innovations in the curriculum and should provide for study and long-range planning
before inaugurating a change. The right or wisdom of teachers and principals to “crowd in” new areas of study without the approval and support of the administration is questionable.

A third conclusion is related to foreign language instruction. The competence of the teacher is seen as a critical factor in foreign language programs. Inaugurating a foreign language program without competent teachers would seem unwise. College students, native high school and college teachers who are not skilled in proper methodology are poor risks as teachers of a second language to elementary school pupils. Instruction via television would seem to be over-reaching its potential when it is the “complete instructional package” and preparation and follow-up are not provided in the classroom.

A fourth conclusion is in the area of evaluation. In most schools the objectives of foreign language instruction were to promote competence in a second language and understanding of foreign people. It is apparent that many of these schools have not used valid and reliable evaluation procedures to determine the extent of pupil progress in the desired directions. It is generally conceded that evaluation procedures for foreign language achievement in the elementary grades are pathetically inadequate.

RECOMMENDATIONS

The findings of this study provide a basis for several recommendations. These recommendations are directed to: (1) local school boards and superintendents, (2) principals, supervisors and teachers in elementary schools, (3) the State Board of Education, and (4) colleges preparing teachers.

It is recommended that local school boards and superintendents, before inaugurating a program of foreign language instruction in the elementary grades, do the following: (1) determine the interest of teachers, pupils, parents, and others con-
cerned with the school curriculum, (2) project long-range plans to provide for continuity at each subsequent grade level, (3) determine initial and future costs and decide on the relative worth of the innovation as compared with the total needs of the system, and (4) select competent teachers who are well trained in the second language and in methodology suitable for teaching elementary school pupils.

It is recommended that elementary school principals, supervisors, and teachers do the following: (1) conduct a cooperative study of the place of foreign language instruction in the elementary school curriculum with emphasis on the specific school situation, (2) develop specific objectives and long-range plans, (3) determine the relationship of foreign language instruction to other areas of the curriculum, and (4) develop procedures for the continuous evaluation of foreign language instruction. Attention should be given to proper methodology and materials. Assistance from resource persons and visits to well established programs would be valuable in orienting the local staff. Elementary principals should be especially concerned with providing strong leadership for curriculum revision. The burden of seeing that the foreign language program is carefully planned and properly executed falls heavily upon the elementary principal.

It is recommended that the State Board of Education do the following: (1) develop certification requirements for foreign language teachers for the elementary grades, (2) collect and distribute information relative to techniques, materials, and equipment to elementary schools offering a second language, (3) provide consultant services, conferences, and workshops for the purposes of assisting in the planning phases for foreign language in the elementary grades and for helping teachers further develop their competence in providing foreign language instruction to elementary pupils, and (4) support research projects that attempt to improve foreign language instruction in the elementary grades, especially in the area of evaluation procedures.
It is recommended that colleges preparing teachers do the following: (1) encourage certain students who are preparing to teach in the elementary grades to develop competence in a foreign language and methodology suitable for teaching the language to elementary pupils, (2) encourage students preparing to teach foreign languages to become competent in methodology suitable for teaching pupils in the elementary grades, and (3) provide summer courses or workshops for the purpose of developing teachers to become competent to teach a second language in the elementary grades.

In addition, foreign language instruction in the elementary grades could profit from the results of well-defined research studies bearing on the following problems: (1) How much and what kind of achievement can be expected at the end of one, two, or three years of instruction in a second language in the elementary grades? (2) Does learning a second language help children to understand foreign people to a significant degree? (3) How does pupil achievement from televised lessons compare with achievement from classroom instruction? and (4) How can regular classroom teachers reinforce instruction given by the specialist?
ABSTRACT
OF
DOCTORAL DISSERTATION

THE THIAMINE, RIBOFLAVIN, AND NIACIN CONTENT OF CHICKEN MUSCLE AS AFFECTED BY FREEZE-DRYING

DOROTHY MARIE ROWE
The Ohio State University, 1961

Freeze-drying is a new method of dehydration which is being applied to the preservation of foods. A frozen product is dried by sublimation. The food products which have been prepared by this process seem to be superior to any previously dehydrated products. The method appears to hold potential in the future as one of the most important means of food preservation. The process of freeze-drying is expensive and for this reason has not been developed on a commercial basis. If the freeze-dried product is proved to be superior in all ways to other preserved food products, undoubtedly the food industry will develop it on a commercial scale.

This research was undertaken to determine something about the nutritive quality of freeze-dried foods. The thiamine, riboflavin, and niacin content of light and dark chicken muscle was studied. These vitamin values as found in fresh raw chicken meat were compared with those in raw dehydrated muscle and in raw, dehydrated, rehydrated, cooked muscle. The vitamin content of fresh cooked chicken meat was compared with cooked, dehydrated chicken meat.
The microbiological assay was the method of determining the level of each vitamin, with turbidity as the measure of biological activity. Lactobacilli were used as the test organisms.

The results of the study permit the conclusion that the thiamine, riboflavin, and niacin in chicken muscle are not adversely affected by freeze-drying techniques. Thiamine is destroyed by cooking by as much as 50 per cent of the original values.

The freeze-drying technique employed removed as much as 96 to 98 per cent of the water from the chicken muscle. The dehydrated meat rehydrated rapidly in distilled water to 80 to 90 per cent of the original weight with the exception of cooked, rehydrated chicken meat, which rehydrated to only 50 to 60 per cent. It is reasonable to believe that fat was the limiting agent in rehydration.

Other results found in this study concurred with earlier studies made. The fresh chicken has a water content of approximately 75 per cent. Dark chicken meat was higher in thiamine and riboflavin than light chicken meat. Light meat was higher in niacin than dark chicken meat. Niacin and riboflavin values of fresh raw chicken muscle agreed with those found in the literature. The light meat contained 0.104 mg. of riboflavin per 100 grams of fresh tissue and 10.51 mg. of niacin. The dark meat contained 0.241 mg. of riboflavin per 100 grams of fresh tissue and 5.30 mg. of niacin.

The thiamine levels were somewhat higher than those found in the literature; however, only values for fryers have been reported, and the chickens used in this experiment were one and a half year old fowls. The thiamine levels per 100 grams of fresh meat were: light meat—0.109 mg., dark meat—0.176 mg.

It can be concluded that the freeze-drying process does not affect the thiamine, riboflavin, or niacin content of chicken muscle.
ABSTRACTS OF MASTERS' THesenES

A COMPARATIVE STUDY OF THE NATURE OF POETRY AND ITS PROPER CRITICISM, ACCORDING TO THOMAS STEARNS ELIOT, YVOR WINTERS, AND VAN WYCK BROOKS

Dorothy Lee Baugher

Some critics are persuaded that poetry is a behavior of the poet, the poem itself being a sign of this behavior; others contend that a poem properly exists in the minds of those who hear or read it; still others regard poetry as a means of achieving certain ethical, psychological, or political results.

Poetry has been described as illusion, as creation of beauty, as reflection, as dynamic expression, the highest truth, an art involving the whole man, a special language telling through emotion what cannot be said in any other way.

As for the criticism of poetry, critics have held (1) that it is impossible, since critics cannot agree, (2) that, on the other hand, there is one perfect and discoverable theory, and (3) that all critical theories contain elements of truth which can be combined into one workable scheme.

In this article, an attempt is made to compare and contrast the views of T. S. Eliot, Yvor Winters, and Van Wyck Brooks as to the nature and meaning of poetry and its proper criticism.

In developing the topic, consideration is given to the beliefs of Eliot, Winters, and Brooks concerning the value, content, and form of the poem as well as the nature of the poet and the creative process. Attention is also given to the basic and pervasive philosophy of each writer in relation to his theories.
Contributions of each to the field of critical philosophy, critical theory, and critical standards are noted and some indication is given of the importance of poetry and its underlying philosophy as a literary, cultural, and moral force.

JOSEPH SALYARDS and IDOTHEA;
or, THE DIVINE IMAGE

CAROLYN LUTZ

This thesis reviews the literary contributions of Joseph Salyards (1808-1885), a Civil War teacher and poet widely known in the Shenandoah Valley.

The last half of the nineteenth century was not a favorable time to inspire poets in the Shenandoah Valley of Virginia. The clash of the Civil War and its aftermath of poverty and defeat left men little leisure for a life of study and contemplation necessary to literary creation. Nevertheless, in this struggle to maintain a way of life and, after defeat, to rebuild, we discover in the person of Joseph Salyards a representative of those days who was able to rise undaunted from poverty and defeat and to devote his life to study, teaching, and writing.

As a teacher, Salyards was learned in literature and language, and as a lecturer he was widely popular. As a poet, he is remembered chiefly for his narrative poem Idothea, a work in progress during a long period of the poet's life. In this work, the poet recaptures concepts and sentiments from a life of contemplation and study and orients them in a topical setting in the familiar Valley landscape. The poem is a vehicle contrived to convey the poet's reflections upon life and man's relation to the cosmos.

The present study, divided into two main sections, reviews Salyards' life as a teacher, lecturer, and poet and analyzes critically his major creative work, the Idothea.
THE REGENERATIVE RELATIONSHIPS EXISTING BETWEEN THE LIVER AND SPLEEN AS ORGANS OF THE RETICULO-ENDOTHELIAL SYSTEM IN THEIR FUNCTIONS OF PHAGOCYTOSIS AND HEMOPOIESIS FOLLOWING A PARTIAL HEPATECTOMY IN RATS

WILLIAM F. JONES

Many physiological problems are inherent in the relationship existing between the liver and spleen as member organs of the reticulo-endothelial system. This is true because their embryonic development into definitive cellular masses is paralleled by sequential changes in, and at times a sharing of, the blood-vascular functions of phagocytosis and hemopoiesis. It has been established by histological methods that the spleen and liver, in that sequence, serve as hemopoietic organs during their development, a function normally reserved to bone marrow in the adult mammal. In the adult organism the liver and spleen are in general relegated to the phagocytic activities of the system. The specific problem of the work here outlined was to determine the potential of these organs to reassume their embryonic functions under a stress situation induced by a partial hepatectomy.

The method employed was to select, mark, and isolate healthy adult rats and to starve them for a 24 hour period as a control technique, after which the median and left lateral lobes of their livers were excised while under anesthesia. The animals were then allowed to recover in the presence of food and water for an interval of 6 days, after which they were again starved for 24 hours before being sacrificed by decapitation and their regenerated livers and their spleens removed for analysis. Tissue samples thus obtained, along with others taken under conditions
identical to those of the hepatectomies for control data, were (1) dehydrated, (2) digested by sulfuric acid over heat, and (3) cleared of carbon by the addition of hydrogen peroxide. Thus prepared, the samples were tested for iron content by a comparative method using the variance of a thiocyanate-iron complex as measured by a colorimeter.

During the 7 days following the removal of the left lateral and median lobes, approximately 60 per cent of the liver, this organ, on the average, regenerated to 77 per cent of its original size. During this same period, the spleen grew in size approximately 18 per cent. Also during this period of liver regeneration and complementary growth in spleen, significant variations occurred in their respective iron concentrations. That of the liver decreased approximately 62 per cent, whereas that of the spleen increased approximately 186 per cent. This change represents a reciprocal variation that is even more significant when considering the total iron content of the organs using wet to dry weight ratios.

A partial explanation of the rapid changes in iron concentration and total iron content can be accounted for by the hypothesis that the removal of so large an amount of the organism’s liver produces a physiological stress, bringing about the need for more liver cells to carry on the liver’s primary function of intermediate metabolism, without a complementary production of iron phagous cells. Under such a stress situation, the spleen seems to compensate for this loss of function by growth and acceleration of its own phagocytic abilities. However, this hypothesis does not exclude the possible inference that the spleen, on the basis of its known hemopoietic function during embryonic development, is actively reasserting a potential for hemopoiesis. Though highly suggestive, the data are indecisive on this point.
AN ECOLOGICAL STUDY OF THE CITY OF KINGSTON, JAMAICA, THE WEST INDIES

JOHN F. SHANK

This study results from field work which involved the use of a prepared questionnaire, interviews, and visits to all the areas of Kingston, Jamaica. More than eight hundred contacts were made including the gathering of information in the camp of the dangerous cult group, Ras Tafari, who have an inveterate hatred of the white man. Interviews included Jamaicans from all major occupations and all social classes.

Of the eight recognized ecological areas of Kingston, five were pertinent to this study. Interviews were taken from each of these areas and responses were compared.

The Ras Tafarites are partly described as follows, “The hair of the men is unkempt and uncut. It usually hangs in long strings all around the head, and usually down to the shoulders. The straggly beard covers nearly all the face.” This group considers the African heritage to be the ideal type and practices racism in its extreme form. They are among the lowest economic group in Jamaica, living along the beach in houses constructed from old crates, boxes and junk automobile bodies. They wear little or no clothing and live primarily from the sea—as fishermen.

Each of the five ecological areas had some elements in common. Differences included family size (with the lower-upper class having the smallest families), distinct differences in property, such as automobile ownership, educational achievement, and religious affiliation.

*Denominations* included Anglican, Baptist, Buddhist, Christian, Confucian, Congregationalist, Evangelican, Hindu, Jewish,
Methodist, Moravian, Presbyterian, and Roman Catholic. Sects included Brethren, Salvation Army, Seventh Day Adventists, Society of Friends, Mennonites, Disciples of Christ, Church of God, Jehovah’s Witness, and Pentecostal. Cults included Ras Tafari, Pocomania, Cumina, Bedwardite, and Revival Zion.

Some of the cult groups practice witchcraft and other superstitions which are believed to result from a mixture of African superstition with European teaching creating a hybrid religion.

The researcher found a relationship between the various types of religious affiliations and social class, residential habitation, standard of living, and race. There appears to be a definite correlation between color of the skin, class and religion . . . “If one were to walk into an upper class Jamaican church, most of the worshipers would be of the light skinned variety. In the lower class cult group the dark skinned would predominate.”

A COMPARISON OF RELIGIOUS GROUPINGS AND OTHER SOCIAL PHENOMENA IN KINGSTON, JAMAICA, THE WEST INDIES

KATIE FLORENCE SHANK

This study deals primarily with the family and religious life of the Jamaicans with emphasis on the process of selective acculturation.

The African was brought to Jamaica by white Europeans to facilitate the plantation system. In time a degree of amalgamation created multiple problems of stratification based on race. By 1830 there were 40,000 Mulattoes and there were also Samboes, Quadroons and Mestees, all of whom were considered colored but distinct from Negroes.
Religious affiliations tend along class and color lines. The Anglican and Catholic Churches attracted few Negroes or "persons of color" whereas the Methodists and Baptists had a large following among these peoples. The sect groups had members primarily from the middle class but the cult groups were popular with people in the lowest economic segment of the population.

Illegitimacy is common regardless of the religious affiliation. Seventy-one per cent of all the births were illegitimate ones, but the problem is unlike that of America or England because there is little if any social stigma attached to illegitimacy because formal marriage is the exception rather than the rule in Jamaica.

Because of the widespread sexual promiscuity, the functions of the family are primarily fulfilled by females. Mothers accept the responsibility for the welfare of the child. The role of mother and grandmother is particularly important in Jamaica.

Among the unusual religious beliefs is Obeah, a tribal religion brought by slaves from West Africa, and Myalism which dates from the tribal religion of the Ashanti. Dances, drumming, sacrifices of chickens, trancing, and the use of drugs are all a part of the practice among those who expect to control the supernatural world. Both survive and help perpetuate superstition, retard modern medical and health practices, and block the extension of Christianity.

There appears to be a relationship between the economic conditions and religious beliefs, for when a member of a cult prospers financially, he almost invariably leaves the cult and joins a sect or church.

The low standard of living, the high illegitimacy rate, the widespread superstition and high illiteracy rate together create a condition which creates the need for the combined forces of the school, the church, and economic development if change is sought.
The thesis is an assessment of Saudi Arabia with respect to its position as pivot country in the Middle East. It discusses the human habitat, strategic location, intercourse with other states, and the cultural aspects of the Kingdom of Saudi Arabia which exert a direct influence on its developments, organization, and future.

The concept of pivotal position is treated from a historic point of view and brought up to date by viewing those elements which encompass a realistic appraisal of the changing political situation.

The natural elements of the environment of the Arabian Peninsula are examined in conjunction with the political units in order to indicate their contribution toward an area of strategic importance.

Cultural institutions are discussed in detail, for it is through these that national growth is achieved, placing the state in a competitive position with others in the world.

Economic activities such as manufacturing, mining, agriculture, and transportation are discussed at some length and the potential of the resource base is subjected to an evaluation.

The strategic location of Saudi Arabia is reviewed with relation to other Arab countries and from a global standpoint.

In conclusion, an evaluation is presented of the changing times where forces of modernism are making inroads into the country's medieval society, establishing a working relationship to the twentieth century while maintaining independence without interdependence among other powers.
THE USE OF TOYS IN THE TEACHING OF ENGLISH TO NAVAJO CHILDREN

SARAH YODER

This research was conducted at Ganado Public School, Ganado, Arizona, and presented to the Faculty of the Graduate School of Madison College in partial fulfillment of the requirements for the degree of Master of Arts in Education.

The study was undertaken in collaboration with the American Toy Institute to discover whether the use of toys in teaching would aid children in learning to speak English and in gaining concepts of the broader American culture.

The subjects of the research included the Navajo children enrolled at the Ganado Public School in the pre-first and first grades. Approximately ninety children were involved. All children were language and culturally handicapped.

Among the specific objectives of the research were the following:

1. To determine how toys can be used to help words become ideas;
2. To discover how toys can be used as aids in communication;
3. To discover how toys can be used to build concepts needed for units of study;
4. To discover how toys can be used to bridge the gap between cultures.

The research, carried out over a three-year period, involved the use of many methods and procedures. Among these were the
descriptive, individual case, group case, controlled observation, comparative, documentary, and experimental.

In a sense, the entire research was of an experimental nature. Hypotheses were tried, tested, and evaluated throughout the study. Since this was the first study of its type to be undertaken, flexibility of methodology, to some extent, was essential.

The following observations were derived as the result of the analysis of recorded data accumulated over the three-year period:

1. Toys are a means of motivating interest.
2. Toys can be used as a means of preventing rather than correcting disciplinary problems.
3. Toys are a device for organizing educational experiences.
4. Toys can be used as a means of emotional expression.
5. Toys can be used for the social development of young children.
6. Toys are an instrument for bridging the gap between cultures.
7. Toys can be used as tools for teaching.
8. Toys can be used as an informal testing device.

These observations lead to some definite conclusions concerning the objectives of the research. The conclusions were further enforced by actual classroom procedures that brought desired results.

The following conclusions can be drawn:

1. When bi-lingual, bi-cultural children are being taught, toys are a necessary part of classroom equipment.
2. Toys are most useful as teaching aids.
3. Children do not seem to read any better than they speak.

4. Toys can be used to help develop all basic skills needed for success in school.

5. Bi-lingual, bi-cultural children can relate to the materials in present day text books only after many first-hand experiences.
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