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Apathy and Death in Early Jamestown

Karen Ordahl Kupperman

Death was ever-present for early colonists in America. Mortality rates for Jamestown in its early years were catastrophic. At the end of its first year, 1607–1608, thirty-eight of the original 108 settlers were alive. The winter of 1609 was the notorious starving time in Virginia, when the population dropped from 500 to sixty in six months.¹ During the period 1619 to 1622, when the Virginia Company poured colonists into Virginia at a massive rate, the mortality rate was once again high. The company sent 3,570 people to America during these three years, making a total population, with the 700 already there, of 4,270. Three thousand colonists died during these three years. At least 6,000 people went to Virginia between 1607 and 1624. In 1625, there were 1,200 people there.² Virtually every letter from Virginia during this period speaks of the helplessness the colonists felt before the phenomenon of widespread deaths.

The high mortality rate was caused by a combination of psychological and physical factors. Observers in America repeatedly spoke of the unexplainable lethargy and apathy of those affected. Clearly, malnutrition was directly or indirectly the leading cause of death. The fact that the colonists were virtually all suffering from malnutrition also offers a way of explaining the colonists' conviction that people were dying of apathy or, as they put it, of idleness and laziness. The nutritional deficiency diseases to which the colonists were prey are characterized in their early stages by symptoms that appear to the layman to be purely psychological, such as anorexia (loss of appetite) and indifference. Since they also cause aching in the limbs, the sufferer may insist on staying in his bed. Therefore, when the colonists speak of people dying of laziness and

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¹ Alden T. Vaughan, *American Genesis: Captain John Smith and the Founding of Virginia* (Boston, 1975), 30, 32, 57, 58.

² Edmund Morgan, *American Slavery, American Freedom: The Ordeal of Colonial Virginia* (New York, 1975), 101; *The Records of the Virginia Company of London*, ed. Susan Myra Kingsbury (4 vols., Washington, 1906–1935), IV, 135, 158–59, 175; Wesley Frank Craven, *White, Red, and Black: The Seventeenth-Century Virginian* (Charlottesville, 1971), 3.

apathy, we may assume they are attempting to describe what they are actually seeing and are not just indulging in rhetoric

There are reasons to believe, however, that malnutrition is not the whole story. Many writers speak of the lethargy being overcome by forced activity, as a result of which the sufferer recovered. Isolation and despair about the future affected many colonists, and this may have intensified the effects of malnutrition to produce the fatal apathy and, as will be shown, apathy produced further malnutrition. This interaction between malnutrition and psychological effects produced fatal withdrawal from life, as can be seen in a fully documented way in the experiences of prisoners of war in twentieth-century examples. Thus the modern cases shed light on what happened in early Virginia.³

The death rate was not uniformly high during Jamestown's first years. Capt John Smith, the archetypal self-made man, was a member of the colony's original governing council. Between the two starving winters, when he alone of the council remained able-bodied, he was declared president and set about to make the colonists work and, incidentally, to make them survive. During his administration of nine months only about eighteen men died, of whom eleven died accidentally.⁴ Smith summarized his achievement in his *Map of Virginia*

For the labour of 30 of the best only preserved in Christianitie by their industrie the idle livers of neare 200 of the rest who living neer 10 months of such naturall meanes, as the Country naturally of it selfe afforded, notwithstanding all this, and the worst furie of the Savages, the extremitie of sicknesse, mutinies, faction, ignorances, and want of victuall, in all that time I lost but 7 or 8 men, yet subjected the Savages to our desired obedience.⁵

Smith, who was prone to expand on his own accomplishments, voluminously and repeatedly put his version of the causes of the great mortality and his own success at keeping the colonists working and alive before the English public. His contemporaries analyzed Jamestown's problems and suggested remedies in a very large number of books.⁶

All these analyses agreed that the Jamestown colonists refused to work, especially to contribute to the food supply by practicing agriculture. Ralph Hamor spoke of the experience of Sir Thomas Dale, who arrived in May 1611 to find the starving colonists at "their daily and usuall workes, bowling in the streetes." He found that the colonists "were not so provident, though

³ Reasoning by analogy must always be used cautiously in historical writing. Its chief disadvantage is that one can never be sure that the two sets of phenomena being compared do not differ in such important ways as to make the comparison fundamentally wrong. Despite this danger, the use of historical analogy seems reasonable in this instance, where there is a complex of behaviors that seem inexplicable in their own terms and are apparently duplicated in a similar situation where they can be explained. No law of history is sought, an illuminating analogy is the goal. This particular analogy, partly based as it is on nutritional evidence, gives a greater possibility of certainty across time since the vitamin and amino acid content of foods and the results of nutritional deficiency in human beings can be determined with accuracy.

⁴ Vaughan, *American Genesis*, 53.

⁵ John Smith, *A Map of Virginia*, in *The Jamestown Voyages Under the First Charter, 1606-1609*, ed. Philip L. Barbour (2 vols., Cambridge, 1969), II, 374.

⁶ These are discussed in Edmund S. Morgan, "The Labor Problem at Jamestown, 1607-18," *American Historical Review*, LXXVI (June 1971), 595-611.

once before bitten with hunger and pennury, as to put corne into the g[r]ound for their winters bread . . .” They got corn for their bread by trading with and bullying the Indians, and additional food was obtained by foraging and hunting. Edmund S. Morgan argues that this behavior was not particularly unusual for Englishmen of this period and that several models consistent with this picture could be found in England. Most Englishmen, he contends, put in a very abbreviated work day and maximizing production was not the goal of work. In the wilderness areas of the north and west, Englishmen followed a pattern similar to that in Virginia. They did not grow grain for their bread, their only agriculture being pasture farming; and they supplemented their diet by gathering nuts and berries. Finally, Morgan offers a third model, that of military expeditions to the continent. Jamestown did see itself as a military outpost, so this comparison is apt. Morgan sees a parallel in the makeup of the colony, composed as it was of nobles and their retainers and undesirables, none of whom was accustomed to or expected to do any real work. Further, military expeditions lived off the land, and most important, they endured death rates similar to Jamestown’s and these deaths were “probably from the same causes—disease and undernourishment.”⁸

One fact remains unexplained—people died in unnecessarily large numbers. However much these soldiers may have expected death on a military expedition, presumably they, like all men, would have preferred to have stayed alive. They did stay alive during the Smith governorship, and therefore it must have been clear to them that it was possible to survive. Morgan himself points out that they suddenly became ardent and successful agriculturalists when tobacco growing became profitable. “Virginians stopped bowling in the streets and planted tobacco in them.” Morgan’s conclusion is that “seventeenth-century Englishmen, it turned out, could adapt themselves to hard and varied work if there was sufficient incentive.” But this brings us back to the original problem, why was not staying alive sufficient incentive? As Robert Cushman contemptuously said to the Plymouth colony: “Even hoggs, doggs, and brut Beasts know their own ease, and can seeke that which is good for themselves.”⁹

The word laziness comes up again and again in the Jamestown story. What is remarkable about Jamestown is that a number of people are said to have died of laziness. Laziness and bad government were considered the primary causes of the general situation at Jamestown. In fact, William Strachey argued that the “sloth, riot, and vanity” were quite different from the underemployment common in England and that if anything comparable were to occur in England there would be general ruin.¹⁰ Patrick Copland spoke in a general way of “God’s rod of *Mortalitie*” punishing the idle livers at Jamestown, while Hamor speaks of the English as being “no more sensible than beasts, would

⁷ Ralph Hamor, *A True Discourse of the Present Estate of Virginia* (London, 1615), 26.

⁸ Morgan, “Labor Problem,” 600–08.

⁹ *Ibid.*, 610, [Robert Cushman], *A Sermon Preached at Plimmoth in New-England, Dec 9th 1621* (London, 1622), 10.

¹⁰ William Strachey, “A True Reportory of the Wracke, and Redemption of Sir Thomas Gates Knight,” in Samuel Purchas, comp., *Hakluytus Posthumus or Purchas His Pilgrimes* (20 vols., Glasgow, 1906), XIX, 46–47.

rather starve in idlenesse (witness their former proceedings) then feast in labour . . ."¹¹ Virtually every writer who compiled a list of causes for Jamestown's distress placed idleness or laziness at or near the top.¹² There was no doubt in contemporary minds that the "Idlenesse and bestiall slouth, of the common sort, who were active in nothing but adhearing to factions and parts, even to their owne ruine," was the root of the problem.¹³

Idleness was said to have led to ruin in two ways. One is that it caused people to become sick, some even sick to death. Samuel Purchas blamed the Virginia Company for "sending ill people that consumed the rest with idlenes ." Alexander Whitaker's judgment is simple. "Many have died with us heretofore thorough their owne filthinesse and want of bodilie comforts for sicke men . . ."¹⁴

Whitaker's remark points to the other way in which idleness led to ruin—neglect of those tasks which would have made survival possible. This is the most serious and the most puzzling effect of Jamestown idleness. George Percy is one of the few reporters from early Jamestown who did not list idleness as the cause of the deaths he daily recorded. He says they mostly died of "meere famine," though he also refers to the "slime and filth" of the water they drank from the river at Jamestown. He explains the "feebleness" of the men by describing how they "watched every three nights lying on the bare cold ground what weather soever came . . ."¹⁵ Contrast this picture with Smith's own summary of the colony's accomplishments under his direction:

James towne being burnt, wee rebuilt it and three Forts More besides the Church and Store-house, we had about fortie or fiftie severall houses to keepe us warme and dry, invironed with a palizado of foureteene or fifteene foot, and each as much as three or foure men could carrie. We digged a faire Well of fresh water in the Fort [and] planted one hundred acres of Corne.¹⁶

Smith devoted himself to justifying his own career as governor, and, more importantly, to demonstrating "what small cause there is men shoulde

¹¹ Hamor, *True Discourse*, 2, Patrick Copland, *Virginia's God Be Thanked, or a Sermon of Thanksgiving for the Happie Successe of the Affayres in Virginia This Last Yeare* (London, 1622), 24.

¹² "A True Declaration of the Estate of the Colonie in Virginia," in Peter Force, comp., *Tracts and Other Papers, Relating to the Origin, Settlement, and Progress of the Colonies in North America* (4 vols., Gloucester, Mass., 1963), III, 15, 17, Gabriel Archer, "A Letter of M. Gabriel Archer, touching the Voyage of the Fleet of Ships, which arrived at Virginia, without Sir Tho. Gates, and Sir George Summers, 1609," in Purchas, *Hakluytus Posthumus*, XIX, 3, Alexander Whitaker, *Good Newes from Virginia* (London, 1613), 22, Samuel Purchas, *Purchas his Pilgrimage*, (London, 1614), 759, Samuel Purchas, "Samuel Purchas of his friend Captaine John Smith, and his Virginia," in John Smith, *The Generall Historie of Virginia, New-England, and the Summer Isles*, in *Travels and Works of Captain John Smith*, ed. Edward Arber and A. G. Bradley (2 vols., Edinburgh, 1910), I, 283, II, 499, John Smith, *The Proceedings of the English Colonie in Virginia, in Jamestown Voyages under the First Charter*, ed. Barbour, II, 461.

¹³ Virginia Company, *A True and Sincere Declaration of the Purpose and End of the Plantation Begun in Virginia* (London, 1610), 10.

¹⁴ Purchas, *Purchas His Pilgrimage*, 759, Whitaker, *Good Newes*, 39.

¹⁵ George Percy, "Observations Gathered out of a Discourse of the Plantation of the Southerne Colonie in Virginia by the English, 1606," in Purchas, *Hakluytus Posthumus*, XVIII, 418.

¹⁶ Smith, *Generall Historie*, II, 612. A fuller description of these accomplishments appeared in Smith, *Proceedings of the English Colonie*, II, 445-46.

starve " He had no doubt about the cause of the distress at Jamestown both before and after his term as president "idleness and carelessness" ¹⁷

Smith made it clear that this was no ordinary laziness "As at this time were most of our chiefest men either sicke or discontented, the rest being in such despaire, as they would rather starve and rot with idlenes, then be perswaded to do anything for their owne reliefe without constraint " This experienced soldier wrote of the "most strange condition of some 150, that had they not bene forced nolens volens perforce to gather and prepare their victuall they would all have starved . " ¹⁸ R Rich, who arrived in 1610 accompanying a new governor, said that the colonists at Jamestown "seem'd distracted and forlorne " After the arrival of the new government, "they unto their labour fall / as men that meane to thrive " Strachey also wrote of this inexplicable lethargy from which it was impossible to shift the colonists or "terrifie from a shameful death " Purchas, in printing Strachey's *True Reportory*, underlined the point in a marginal note saying, "True cause of misery in Virginia" ¹⁹

These repeated references to a strange despair which could lead to death are reminiscent of modern examples from World War II and the Korean War There are reports, from many different sources, of mysterious deaths from what the prisoners dubbed "give-up-itis" ²⁰

¹⁷ *Ibid* , II, 450, Smith, *Generall Historie*, II, 611, 615

¹⁸ John Smith, *A True Relation of Such Occurrences and Accidents of Noate as Hath Hapned in Virginia*, in *Jamestown Voyages Under the First Charter*, ed Barbour, I, 174, Smith, *Proceedings of the English Colonie*, II, 446

¹⁹ R Rich, *Newes from Virginia* (London, 1610), sig B, B2, Strachey, "True Reportory," XIX, 19, 48

²⁰ The behavior of American prisoners in camps in Korea was a subject of great controversy following the Korean War, a controversy that has recently been ended by executive decree *New York Times*, Friday, November 4, 1977, p A8 Inexplicable lethargy leading to death in Korean prisoner-of-war camps first came to public attention in Eugene Kinkead, "The Study of Something New in History," *New Yorker*, Oct 26, 1957, pp 114-53 Kinkead expanded the material slightly in a book entitled *In Every War But One* (New York, 1959) Deaths from "give-up-itis" were, in Kinkead's treatment, part of a general indictment of the softness of American society Kinkead's thesis has come under considerable attack, but little of the attack affects his description of deaths from lethargy Critics of this particular aspect of his writing point out that those who died from such lethargy were not in perfect health, that they were either sick or malnourished or both, though these critics agree that the sickness would not normally have been fatal This line of reasoning is argued by Albert D Biderman, *March to Calumny The Story of American POW's in the Korean War* (New York, 1963), 21, Clarence L Anderson, Alexander M Boysen, Sidney Esenstein, Gene N Lam, and William R Shadish, "Medical Experiences in Communist POW Camps in Korea," *Journal of the American Medical Association*, 156 (Sept 11, 1954), 120-22, Harold E Fey, "Greatest Victory in Korea A Review Article," *Christian Century*, May 22, 1957, pp 655-56, Joan Colebrook, "Prisoners of War," *Commentary*, 57 (Jan 1, 1974), 31-32, William Lindsay White, *The Captives of Korea An Unofficial White Paper on the Treatment of War Prisoners* (New York, 1957), Edgar H Schein, "Epilogue Something New in History?" *Journal of Social Issues*, XIII, no 3 (1957), 59, Edgar H Schein, review of Biderman, *March to Calumny*, in *American Sociological Review*, 28 (Aug 1963), 650, William Peters, "More on Our POWs," *Reporter*, March 5, 1959, p 38, John Greenway, "The Colonel's Korean 'Turncoats'," *Nation*, Nov 10, 1962, p 304 The other line of attack by Kinkead's critics concerns his assertion that the Korean War is unique in history in its deaths from fatal withdrawal They argue that such deaths occurred among prisoners of war in World War II and the American Civil War For this line of attack, see Biderman, *March to Calumny*, 19-20, 102-04, Schein, "Epilogue Something New in History?," Schein, review of Biderman, *March to Calumny*, William Peters, "When the Army Debunks the Army A Legend of the Korean War," *Encounter*, July 15, 1960, p 77 J E Nardini, before the controversy began, described deaths from "fatal withdrawal" among American prisoners of the Japanese

In the temporary camps disease and exposure took a heavy toll in lives. But it was the feeling of many men, including some of the doctors who survived the experience, that some of these deaths were not warranted by a man's physical condition. Instead, what appeared to happen was that some men became so apathetic that they ceased to care about their bodily needs. They retreated further into themselves, refused to get any exercise, and eventually lay down as if waiting to die. The reports were emphatic concerning the lucidity and sanity of these men. They seemed willing to accept the prospect of death rather than to continue fighting a severely frustrating and depriving environment.²¹

Ralph R. Greenson reports apathy as occurring, though not leading to death, in World War II servicemen who had "spent long periods often free of actual danger, but with poor food, in bad climates, under conditions of severe boredom, and in great loneliness." This description offers a striking parallel to the situation of the Jamestown colonists.²² American prisoners of the Japanese in World War II are also described as sometimes suffering from a "fatal withdrawal" marked by a "lack of willingness or ability to marshal the powers of will necessary to combat disease." In this case, the men died within three or four days after lying down with a blanket over their heads and refusing food.²³ Several writers emphasize that apathy, "playing it cool," occurred to some extent in all men in these stress situations and that in its mild form it can be a form of protection for the ego.²⁴

Clarence L. Anderson, a medical doctor who was himself a prisoner in Korea, gave an extensive interview in which he analyzed the phenomenon and its causes. As he described it, and if differences between seventeenth and twentieth-century phrasing are allowed for, this "give-up-itis" begins to sound very much like the "most strange Condition" of the "distracted and forlorn" colonists at Jamestown. Anderson said death took place at any time up to three weeks from onset if the prisoner was not forced to respond to his environment. Malnutrition was a leading cause of death in the prison camps, but Anderson

during World War II. See his "Survival Factors in American Prisoners of War of the Japanese," *American Journal of Psychiatry*, 109 (Oct. 1952), 241-42. These two lines of argument destroyed Kinkead's contention that Americans had gone soft and that this softness was shown by mysterious deaths among prisoners in Korea. None of Kinkead's critics denied, however, that fatal withdrawal was a factor in some of the deaths in the prison camps. In fact the major clinical descriptions of the phenomenon as it occurred in Korea appeared in Anderson, Boysen, Esenstein, Lam, and Shadish, "Medical Experiences in Communist POW Camps," 120-22, Edgar H. Schein, "Reaction Patterns to Severe, Chronic Stress in American Army Prisoners of War of the Chinese," *Journal of Social Issues*, XIII, no. 3 (1957), 23, Harvey D. Strassman, Margaret B. Thaler, and Edgar H. Schein, "A Prisoner of War Syndrome: Apathy as a Reaction to Severe Stress," *American Journal of Psychiatry*, 112 (June 1956), 999, 1002. The present article serves to reinforce both lines of argument of Kinkead's critics.

²¹ Schein, "Reaction Patterns to Severe, Chronic Stress," 21. A fuller treatment of the same material appears in Strassman, Thaler, and Schein, "Prisoner of War Syndrome," 999. See also Anderson, Boysen, Esenstein, Lam, and Shadish, "Medical Experiences in Communist POW Camps," 121, White, *Captives of Korea*, 86-87, and Erving Goffman, *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates* (New York, 1961), 60-61.

²² Ralph R. Greenson, "The Psychology of Apathy," *Psychoanalytic Quarterly*, XVIII (1949), 291-92.

²³ Nardini, "Survival Factors in American Prisoners of War," 242.

²⁴ Greenson, "Psychology of Apathy," 296-301, Strassman, Thaler, and Schein, "Prisoner of War Syndrome," 999, 1003, Goffman, *Asylums*, 64-65.

believed that "almost all cases of malnutrition were aggravated, if not actually caused, by the prisoners' disinclination to eat unfamiliar foods."²⁵ Smith ordered his men to eat food the Indians offered them, ridiculing their delicacy "And this Salvage trash, you so scornfully repine at, being put in your mouthes your stomachs can digest it" ²⁶ Lethargy prevented Korean War prisoners from accepting their guards' offers of a chance to go into nearby hills to collect firewood ²⁷ Strachey, arriving with the shipwrecked fleet from Bermuda, found that the colonists had torn down the palisades and gates and had destroyed empty houses "rent up and burnt, rather than the dwellers would step into the Woods a stones cast off from them, to fetch other firewood."²⁸

Anderson reported that able-bodied men in the Korean prison camps refused to care for the sick and wounded. Instead, "the strong regularly took food from the weak." Far from caring for sick men, the other prisoners sometimes rolled them out into the snow to die. ²⁹ When Smith described the new regime that he intended to enforce under his governorship at Jamestown, he added "But I protest by that God that made me, since necessitie hath not power to force you to gather for your selvs those fruits the earth doth yeeld, you shall not only gather for your selves, but for those that are sicke." He also said that the sick would get the remaining English provisions. ³⁰ The martial law code finally prescribed for Jamestown after the second great mortality dictated that the "serjeant" should inform himself about all men who are sick or wounded and should visit them daily, "to inquire whether they bee not defrauded by the Phisitions and Surgeons, of such necessary helpes as are delivered unto them, for their preservations and recoveries." He was to inform the captain of any dishonest dealings with the sick. ³¹

Cure of the strange despair was the same in the early modern and the modern examples. "Two things seemed to save the man close to 'apathy' death: getting him on his feet doing something, no matter how trivial, and getting him interested in some current or future problem."³² Sometimes the approach was to kick or choke the victim until he became angry enough to get up and fight. If he were compelled to move around every day, the prisoner would recover within about ten days. ³³ The Virginia Company's report of "Sir Thomas Gates his experiment" is strikingly similar. "he professeth, that in a fortnights space he recovered the health of most of them by moderat labour,

²⁵ Anderson's interview was first published in Kinkead, "Study of Something New in History," 153-59. It also appears in Kinkead, *In Every War But One*, 141-50, 154-57. See also Greenson, "Psychology of Apathy," 300; White, *Captives of Korea*, 76-77, 94-96.

²⁶ Smith, *Proceedings of the English Colonie*, II, 448.

²⁷ Kinkead, "Study of Something New in History," 155.

²⁸ Strachey, "True Reportory," XIX, 44-45; "A True Declaration of the Estate of the Colonie in Virginia," III, 15.

²⁹ Kinkead, "Study of Something New in History," 154; White, *Captives of Korea*, 87-88.

³⁰ Smith, *Proceedings of the English Colonie*, II, 447-48.

³¹ William Strachey, "For the Colony in Virginea Britannia, Lawes, Divine, Morall, and Martiall, etc." in Force, comp., *Tracts and Other Papers*, III, 52.

³² Strassman, Thaler, and Schein, "Prisoner of War Syndrome," 999.

³³ Nardini, "Survival Factors in American Prisoners of War," 242; Schein, "Reaction Patterns to Severe, Chronic Stress," 23; Kinkead, "Study of Something New in History," 158; White, *Captives of Korea*, 88-89.

whose sickness was bred in them by intemperate idleness" Smith, once he forced his men to work, claimed to have lost only seven or eight men in nine months.³⁴

Life in Jamestown seems to have borne some similarities to life in the prison camps. In both cases, the men were imprisoned in a small area. Indian hostility made leaving the immediate area of Jamestown extremely difficult and risky during the times of great mortality.³⁵ In 1624 George Wyatt, writing to his son who was governor of Virginia, referred to the Indians as "your Confiners."³⁶ In both cases, the men were underemployed. This was seen by the army analysts as a prime cause of the lethargy in Korea, and was assumed to be a deliberate policy of the captors to destroy morale. Neither group of men knew when deliverance would come, or if it would come at all. Uncertainty over when and whether release would ever come was a main ingredient in the fatal despair in Korea.³⁷ Though supply ships were sent to Jamestown quite frequently during the early years, the colonists knew that events could always intervene to cut them off from England. The tempest that wrecked a great supply fleet on Bermuda was a good example. An even better one was the fate of the lost colonists of Roanoke. Attempts to provision that colony were frustrated by official fears of the Spanish Armada and by unreliable crews. When English ships finally arrived, the colonists had vanished.³⁸ More than once, the Virginia Company threatened to abandon the Virginia colonists.³⁹

Disease and malnutrition leading to disease were clearly the leading causes of death in both early Virginia and the modern prisoner of war camps. The nutritional-deficiency diseases to which the colonists and prisoners were prey exhibit symptoms in their early phases which appear to be purely psychological, such as loss of appetite (anorexia) and indifference. Equally important is the judgment, made by doctors in the prison camps, that the psychological effects of imprisonment intensified the symptoms of the disease. Anorexia, of course, would produce further malnutrition and more extreme symptoms.

Prisoners in Asia in World War II and in the Korean War were fed a diet of polished rice, which is deficient in thiamine. In addition to protein-calorie malnutrition, the prisoners were prey to beriberi, which is a thiamine-deficiency disease. Dr. R. C. Burgess and Dr. Eric Cruickshank, prisoners of the

³⁴ "A True Declaration of the Estate of the Colonie in Virginia," III, 14, Smith, *Proceedings of the English Colonie*, II, 448.

³⁵ Strachey, "True Reportory," XIX, 45.

³⁶ J. Frederick Fausz and Jon Kukla, eds., "A Letter of Advice to the Governor of Virginia, 1624," *William and Mary Quarterly*, XXXIV (Jan. 1977), 118.

³⁷ Kinkead, "Study of Something New in History," 141, British Ministry of Defence, *Treatment of British Prisoners of War in Korea* (London, 1955), 2, 19, Strassman, Thaler, and Schein, "Prisoner of War Syndrome," 999, 1002, Schein, "Reaction Patterns to Severe, Chronic Stress," 22. In all these ways, the camps and Jamestown exhibited the qualities of total institutions as described in Goffman, *Asylums*, 15-16, 21.

³⁸ "John White's Account of the Abortive Voyage of the *Brave* and the *Roe*," in *The Roanoke Voyages, 1584-1590*, ed. David B. Quinn (2 vols., London, 1955), II, 562-69, "John White's Narrative of the 1590 Voyage to Virginia," *ibid.*, 598-622, John White to Richard Hakluyt, Feb. 4, 1593, *ibid.*, 712-16.

³⁹ John Smith, *Advertisements For the Unexperienced Planters of New-England, or Any Where, in Travels and Works of Captain John Smith*, ed. Arber and Bradley, II, 928, *Records of the Virginia Company*, ed. Kingsbury, III, 688.

Japanese at Changi prison on Singapore, kept careful records on the beriberi sufferers they treated in "the last great epidemic of beriberi."⁴⁰ Many of these suffered from anorexia, as is common in beriberi. Another symptom of the disease is muscle weakness and leg cramps, which might have been the initial reason why prisoners preferred to remain on their cots.⁴¹ Fatigue and decreased attention span are symptoms of beriberi, but Cruickshank thought that many of the behavioral symptoms exhibited by his patients were as much "the result of fighting a losing battle, the mental distress of having become prisoners of the Japanese, and consequent sense of indignity, fear, and uncertainty" as of the disease. In fact, "mental symptoms such as inability to concentrate, self-consciousness, irritability, and depression and uncertain memory ('Changi memory') were very common both in beriberi sufferers and in others. Many of the beriberi patients on the other hand were cheerful, mentally alert, and optimistic 'and there was certainly no state of mind typical of the beriberi patient.'" Further, Cruickshank thought the prisoners' psychological reaction to the new environment was so negative and the diet of boiled rice was so repugnant to many that they were unable to adjust to it, so that anorexia was a product of the interaction of psychological and nutritional factors.⁴²

Beriberi was not the disease which would have affected the colonists in early Virginia, as their basic diet was maize, which is relatively rich in thiamine.⁴³ An unsupplemented maize diet is pellagra-producing, because the niacin in corn is bound to indigestible constituents and is therefore not available, and because maize is high in leucine.⁴⁴ Pellagra, which occurs most in warm weather, was not recognized by doctors in Europe before the introduction of maize from America. It was epidemic in the southeastern United States until just before World War II. As in beriberi, the pellagra sufferer first becomes anorexic and apathetic.⁴⁵ He complains of pain in the extremities and may have loss of motor function. In early stages, he appears very pale and thin, though when the disease is chronic, the victim develops a thick red rash if exposed to the sun.⁴⁶ William Wood wrote of the pallor of Virginians who came to New England to trade, and attributed this paleness to the heat of Virginia's summer which "hath dried up much *English* blood."⁴⁷ Recent

⁴⁰ Robert R. Williams, *Toward the Conquest of Beriberi* (Cambridge, 1961), 68-70.

⁴¹ *Ibid.*, 62, 72, 79; Harold H. Sandstead, "Clinical Manifestations of Certain Vitamin Deficiencies," in *Modern Nutrition in Health and Disease: Dietotherapy*, ed. Robert S. Goodhart and Maurice E. Shils (Philadelphia, 1973), 594.

⁴² Williams, *Conquest of Beriberi*, 72.

⁴³ Richard Sutch argues that beriberi occurred among nineteenth-century American slaves on their corn-pork diet. Though both foods are high in thiamine, he believes the vitamin would have been destroyed by improper storage and processing. Richard Sutch, "The Care and Feeding of Slaves," in Paul A. David, Herbert G. Gutman, Richard Sutch, Peter Temin, and Gavin Wright, *Reckoning with Slavery: A Critical Study in the Quantitative History of American Negro Slavery* (New York, 1976), 277-80.

⁴⁴ Sandstead, "Clinical Manifestations of Certain Vitamin Deficiencies," 596-97; C. Gopalan and Kamala S. Jaya Rao, "Pellagra and Amino Acid Imbalance," in Paul L. Munson, Egon Diczfalusy, John Glover, and Robert E. Olson, eds., *Vitamins and Hormones: Advances in Research and Applications*, XXXIII (New York, 1975), 516, 523.

⁴⁵ For a description of mental disturbances among pellagra patients, see *ibid.*, 505-07, 517-18.

⁴⁶ Sandstead, "Clinical Manifestations of Certain Vitamin Deficiencies," 596-97.

⁴⁷ William Wood, *New England's Prospect* (London, 1639), 7.

research with rats on a corn diet has also shown a direct link between malnutrition and behavior. Rats fed on maize show a marked increase in sensitivity to pain, because maize is deficient in tryptophan, the precursor of the neurotransmitter serotonin. Lack of serotonin may also contribute to the mental changes in pellagra sufferers.⁴⁸

Prisoners and colonists suffered from protein-calorie malnutrition most of the time. This can result in anorexia, as well as decrease in nervous system function and reduction in physical working capacity. One most important effect is lowering of resistance to infection.⁴⁹ Infection was a serious cause of death in Virginia during its early period. Life expectancy continued to be lower in the Chesapeake region throughout the seventeenth century than it was in New England, probably because of the weakening effects of endemic malaria, which thrived after being introduced by Europeans.⁵⁰ Chronic diarrhea, what the colonists called "bloody flux," plagued prisoners and colonists alike. Some Virginians believed it had been introduced by the passengers of a single ship and was therefore an infection. Most who wrote about diarrhea believed that it was caused by eating Indian corn, which had not been ground sufficiently fine.⁵¹ This is very similar to the belief of American prisoners in Korea that the crushed but undercooked soybeans that they were given were responsible for their dysentery. The prisoners' rejection of soybeans rendered their diet much more inadequate in terms of protein.⁵²

Scurvy was by far the disease the colonists most commonly identified, although this term could be applied to any condition that made the skin scaly. Scurvy, like pellagra and beriberi, is characterized by anorexia, weakness, and aching in the joints and muscles, particularly at night. William Bradford reported a ship's master who was lame because of scurvy. Scurvy also predisposes the sufferer to other infections.⁵³ People were sometimes said to have died of scurvy, as in the early days of Plymouth colony, when the Pilgrims lived on their ship and had to wade to shore. "it brought to the most, if not to all, coughes and colds, the weather proving sodainly cold and stormie, which afterward turned to the scurvey, whereof many died."⁵⁴ Scurvy was recognized

⁴⁸ John D. Fernstrom and Loy D. Lytle, "Corn Malnutrition, Brain Serotonin and Behavior," *Nutrition Reviews*, XXXIV (1976), 257-62; Gopalan and Jaya Rao, "Pellagra and Amino Acid Imbalance," 519.

⁴⁹ Fernando E. Viteri and Guillermo Arroyave, "Protein-Calorie Malnutrition," in *Modern Nutrition*, ed. Goodhart and Shils, 609-10, 613; C. E. Taylor and Cecile DeSweemer, "Nutrition and Infection," in *Food, Nutrition and Health*, ed. Miloslav Rechcigl (Basel, 1973), 212-13, 216.

⁵⁰ Darrett B. Rutman and Anita H. Rutman, "Of Agues and Fevers: Malaria in the Early Chesapeake," *William and Mary Quarterly*, XXXIII (Jan. 1976), 40-42, 48-49, 59-60; Lorena S. Walsh and Russell R. Menard, "Death in the Chesapeake: Two Life Tables for Men in Early Colonial Maryland," *Maryland Historical Magazine*, LXIX (Summer 1974), 211-27.

⁵¹ *Journals of the House of Burgesses of Virginia, 1619-1658/59*, ed. H. R. McIlwaine (Richmond, Va., 1915), 34; *Records of the Virginia Company*, ed. Kingsbury, III, 448, 495, IV, 41, 175. The only available sieve for sifting corn was a piece of leather with holes punched in it.

⁵² White, *Captives of Korea*, 76-77; Kinkead, "Study of Something New in History," 156.

⁵³ Sandstead, "Clinical Manifestations of Certain Vitamin Deficiencies," 599; D. S. McLaren, "Undernutrition," in *Food, Nutrition and Health*, ed. Rechcigl, 166; Taylor and DeSweemer, "Nutrition and Infection," 213; William Bradford, *Of Plymouth Plantation*, ed. Samuel Eliot Morison (New York, 1952), 189.

⁵⁴ William Bradford and Edward Winslow, *A Relation or Journall of the Beginning and Proceedings of the English Plantation Setled at Plimoth in New England* (London, 1622), 8, usually referred to as *Mourt's Relation*.

by seventeenth-century Englishmen as a nutritional-deficiency disease. Oranges and lemons were well-known to be "good either to prevent or cure the Scurvy." Moreover, there are several reports from Newfoundland ventures that turnips and wild roots and other green vegetables, or "springing hearbes," were also good cures. Sir William Vaughan suggested ships on long voyages carry turnips for ballast.⁵⁵ Despite their knowledge of scurvy's cure, these same writers believed that it attacks only the soft and lazy, and there was, therefore, a moral element in contracting the disease.⁵⁶

Here again is that conjunction of psychological, or moral, causes with physical ones, with their mutual intensification, which the early colonists as well as doctors in prison camps thought they saw. John Winthrop's description of the effect of scurvy on the poor in Boston illustrates this view:

The poorer sort of people (who lay long in tents, etc.) were much afflicted with the scurvy, and many died, especially at Boston and Charlestown; but when this ship came and brought store of juice of lemons, many recovered speedily. It hath been always observed here, that such as fell into discontent, and lingered after their former conditions in England, fell into the scurvy and died.⁵⁷

From this viewpoint, the weakness and fatigue that appear at the onset of many nutritional-deficiency diseases could be attributed to laziness. When more advanced stages of the disease appeared, the disease would seem to have attacked the person who was lazy or inferior in character. Cramps in the legs and joints would have predisposed the victim to refuse to get out of bed. Anorexia and apathy, symptoms of the disease, could be perceived as unwillingness to help oneself. And yet both seventeenth-century and twentieth-century eyewitnesses agreed that there were, in some cases, an apathy and withdrawal from life that could not be explained entirely by physical causes and that could intensify the diseases to which men were subject. This interaction between psychological and physical causes can be seen clearly in the second great period of mortality in early Virginia, 1619 to 1622.

In 1618, the leadership of the Virginia Company in London changed hands. The new leadership, convinced that more colonists were required to make the colony a success, began pouring colonists into Virginia at an unprecedented rate. To the 700 colonists already there, they added new settlers at the rate of over 1,000 per year for the three years, 1619 to 1622. The colony was totally unprepared to cope with these large numbers, most of whom arrived in the spring and faced the difficult summer season first. Almost every letter from

⁵⁵ Wood, *New Englands Prospect*, 50; Smith, *Generall Historie*, II, 504; [William Vaughan], *The Golden Fleece Divided into Three Parts, Under Which are Discovered the Errours of Religion, the Vices and Decayes of the Kingdome, and Lastly the Wayes to Get Wealth, and to Restore Trading So Much Complayned of* (London, 1626), Part III, 45, 47-49, 56; John Mason, *A Briefe Discourse of the New found-land* (Edinburgh, 1620), sig. A4; John Guy, "Master John Guy his Letter to Master Slany Treasurer, and to Councill of the New-found-land Plantation," in Purchas, *Hakluytus Posthumus*, XIX, 418-19.

⁵⁶ Vaughan, *Golden Fleece*, Book III, 29; Hamor, *True Discourse*, 19; Thomas Graves, "A Letter sent from New-England by Master Graves, Engineer, Now Resident There [Sept. 1629]," in *Chronicles of the First Planters of the Colony of Massachusetts Bay, 1623 to 1636*, ed. Alexander Young (Boston, 1846), 266; Smith, *Generall Historie*, II, 505.

⁵⁷ John Winthrop, *Winthrop's Journal: "History of New England," 1630-1649*, ed. James Kendall Hosmer (2 vols., New York, 1908), I, 58.

Virginia mentioned widespread death; the Virginia Company complained that some people said the enterprise was simply "a more regulated kind of killinge of men"⁵⁸ In 1622 the Indians, alarmed by the threatened growth of the colony, struck plantations along the James River, killing 347 colonists. In discussing this massacre, the Virginia Company was forced to admit that 3,000 colonists had died of other causes during the preceding three years. Famine and death continued because the colonists were afraid to gather food, hunt, and plant crops to the extent they had formerly. George Sandys wrote in 1623 that because of "extreame sicknes, and unheard of mortalitie," following the massacre, the living were "hardlie able to bury the dead." He further emphasized that the mortality during the year following the massacre was double the number actually killed by Indians.⁵⁹

Malnutrition and nutritional-deficiency diseases were clearly the major cause of death in Virginia from 1619 to 1622, just as they had been in earlier episodes of high mortality. Letter after letter, both before and after the massacre, spoke of the suffering of the colonists from famine. This episode of mortality differs from the early Jamestown ones chiefly in lacking the sense of utter bewilderment that emerges from the early narratives. The later writers knew why people were dying. In addition to simple famine, they pointed to outbreaks of disease that had come from the passengers on a single ship or the provisions they had brought with them, particularly a load of "stinking beare" brought on the ship *Abigail*.⁶⁰ They pointed to the fact that mortality rates varied greatly depending on the year, and that in years of high mortality the Indians and the colonists' domesticated animals were also affected.⁶¹ Finally, they clearly understood by now that it was important to arrive after the hot summer and that if a colonist survived the seasoning period of the first two years, he would be apt to survive to a normal age.⁶² Many writers added that new colonists died not only because they were sent in the spring or early summer, but also because they were not sufficiently supplied with provisions.⁶³

Nevertheless, despite this greatly increased understanding of the agents and circumstances of death in the colony, many Virginians continued to write of despair as a cause of death. Well before the massacre, the Virginia Company pointed out in a broadside that the mortality of 1619-1620 "hath proceeded from a disease in it selfe not mortall," and George Thorpe and Thomas Nuce who were actually in the colony, reported that despair over conditions of life combined with inadequate supplies to make for high mortality rates. As Thorpe put it, "I thanke God I never had my health better in my life then I have had since my cominge into this Countrey and I could saie the like of divers others and am pswaded that more doe die here of disease of there minde

⁵⁸ *Records of the Virginia Colony*, ed. Kingsbury, III, 489

⁵⁹ *Ibid.*, IV, 65, 74, 159, 216

⁶⁰ *Ibid.*, II, 441, 447, III, 298, IV, 25, 65, 77-78, 100, 109, 159, 233, 237, 451, 525

⁶¹ *Ibid.*, III, 92, 220, 244, IV, 233, 235, 238, 522, *Journals of Burgesses*, ed. McIlwaine, 57

⁶² His Majesties Counsell for Virginia, "A Declaration of the State of the Colonie and Affaires in Virginia," in Force, comp., *Tracts and Other Papers*, III, 3-4, *Records of the Virginia Company*, ed. Kingsbury, III, 298, 301, IV, 451-52, *Journals of Burgesses*, ed. McIlwaine, 23

⁶³ *Records of the Virginia Company*, ed. Kingsbury, II, 439, III, 456, IV, 13, 22, 136, 147-48, 160, 174-75, 451

then of their body" Just as in the earlier Jamestown mortality, there was the conviction that the "mother and Cause" of contagious disease was "ill example of Idlenes."⁶⁴ The massacre of 1622 killed relatively few settlers, but as William Capps wrote, "the last massacre killed all our Countrie," because "they burst the heart of all the rest." Nuce himself was thought to have died of a broken heart because so many of his colonists were dead. Sandys wrote his brother in 1623 that the company's tenants were so dejected that "most give them selves over, and die of Melancholye." He went on to praise Lady Wyatt's cheerfulness, which "is in this Countrie an Antidote against all diseases."⁶⁵ Sandys' phrase "give them selves over" sounds very much like fatal withdrawal. It seems clear that despair interacted with disease and famine and that they reinforced each other just as in the other episodes.

Both the modern wars and the colonization of America offer control groups that might have developed the same strange lethargy, but either did not or overcame it. As Philip Vincent of Massachusetts Bay reminded his readers:

All beginnings are ever difficult Some errorrs were committed, and many miseries were endured. No man is wise enough to shunne all evils that may happen; but patience and painefulnesse overcame all.⁶⁶

As Vincent said, all colonists had difficulties in the beginning, and some of these difficulties were clearly brought on by their own lack of planning. The first colony at Roanoke was a military expedition under the command of Ralph Lane. These colonists, who included the painter John White and the scientist Thomas Hariot, were sent by Walter Raleigh to learn about the resources and people of America and, it was hoped, to find the passage to the South Sea. They stayed in Virginia colony for a year, 1585–1586. They were as poorly prepared to produce their own food as were the Jamestown colonists. In describing how dependent his men were on Indian gifts of food, Lane wrote: "For at that time wee had no weares for fishe, neither could our men skill of the making of them, neither had wee one grayne of corne for seede to put into the ground." Eventually, Lane was forced to disperse his colonists in order to live off the land.⁶⁷ As David Quinn put it, Lane's colonists "became largely parasitic on Indian society."⁶⁸ But despite their lack of skill and preparation, the Roanoke colonists did take the steps necessary to survive. When they were dispersed, they did eat "the victuall of the countrey, of which some sorts were very straunge unto us. . . ." Hariot points out that only four men of 108 died during the year and those four had been sickly before they came to America.⁶⁹ When John Smith's exploring party wanted to turn back from "the Discoverie of the

⁶⁴ *Ibid.*, III, 226, 275, 417, 456.

⁶⁵ *Ibid.*, IV, 38, 74, 75, 232.

⁶⁶ [Philip Vincent], *A True Relation of the Late Battell fought in New-England, between the English and the Pequet Salvages* (London, 1637), sig. B.

⁶⁷ Ralph Lane, *An Account of the Particularities of the Employments of the English Men Left in Virginia*, in *Roanoke Voyages*, ed. Quinn, I, 276, 283–84.

⁶⁸ David Beers Quinn, *England and the Discovery of America, 1481–1620: From the Bristol Voyages of the Fifteenth Century to the Pilgrim Settlement at Plymouth* (New York, 1974), 302–03.

⁶⁹ Thomas Hariot, *A Briefe and True Report of the New Found Land of Virginia*, in *Roanoke Voyages*, ed. Quinn, I, 383, 384.

bay," Smith shamed them with a speech about the courage and steadfastness of Lane's soldiers who "importuned him to proceed in the discoverie of Morattico, alleaging, they had yet a dog, that being boyled with Saxafras leaves, would richly feed them in their returnes" ⁷⁰

Plymouth colony also had initial difficulties that were overcome. Reports of exploring voyages to New England from early in the century had stressed the healthfulness of the climate and emphasized that, though the food was "none of the best," all were able to labor well ⁷¹ Many of the Pilgrims at Plymouth were sick the first winter. About half of all the settlers died, and these deaths were in similar proportions for "saints" and "strangers" ⁷² Then, during the spring of the first two years, the Pilgrims suffered from malnutrition, which "much abated the strength and flesh of some, and swelled others" ⁷³ Moreover, despite the example of Jamestown, these colonists were also ill-prepared to live off the land.

For though our Bays and Creekes were full of Basse, and other fish, yet for want of fit and strong Saynes, and other netting, they for the most part brake thorow and carried all away before them. And though the Sea were full of Cod, yet wee had neither tackling nor harseis for our Shallops. And indeed had wee not beene in a place where divers sorts of shell-fish are that may be taken with the hand, wee must have perished, unless God had raised some unknown or extraordinary meanes for our preservation ⁷⁴

Plymouth colony, like Jamestown, was organized economically as a communist society during the first two years, all colonists working for the company ⁷⁵ As in the case of Lane's Roanoke, however, the Pilgrims overcame these initial difficulties, "enduring, with great hope and patience, all the misery that Desart could put upon them," and did not succumb to the strange lethargy which afflicted Jamestown ⁷⁶ There are no reports of apathy or laziness from the early years of Plymouth that correspond to those from Virginia. Dorothy Bradford may have committed suicide by throwing herself from the Mayflower while it was anchored off Cape Cod, and John Carver's wife, "being a weak woman," died allegedly of a broken heart five or six weeks after his death ⁷⁷ These are the only reports of deaths related to despair from this period of Plymouth history. The lack of other reports and the failure of even these two to conform to the pattern seen elsewhere adds weight to Bradford's thought written following the first winter that the Pilgrims had "borne

⁷⁰ Smith, *Proceedings of the English Colonie*, II, 402

⁷¹ John Brereton, *A Briefe and True Relation of the Discoverie of the North Part of Virginia*, (London, 1602), 11, James Rosier, *A True Relation of the Most Prosperous Voyage Made in This Present Yeere 1605, by Captaine George Waymouth* (London, 1605), sig. E2, John Smith, *A Description of New England*, in *Travels and Works of Captain John Smith*, ed. Arber and Bradley, I, 193-94

⁷² Bradford, *Of Plymouth Plantation*, 77, George F. Willison, *Saints and Strangers: Being the Lives of the Pilgrim Fathers and Their Families, with Their Friends and Foes* (New York, 1964), 469-87

⁷³ Edward Winslow, *Good Newes from New-England* (London, 1624), 12, 36

⁷⁴ *Ibid.*, 12-13

⁷⁵ Smith, *Generall Historie*, II, 782-83, Larzer Ziff, *Puritanism in America: New Culture in a New World* (New York, 1973), 37

⁷⁶ Vincent, *True Relation of the Late Battell*, sig. A4

⁷⁷ Bradford, *Of Plymouth Plantation*, xxiv, 86, Willison, *Saints and Strangers*, 410-87

their sad affliction with much patience and contentedness as I think any people could do " During the periods of sickness, the able-bodied faithfully cared for the sick ⁷⁸ John Smith repeatedly pointed to the way in which the Pilgrims overcame their problems, though he could not resist reminding them that they could have avoided misery by studying his writings on New England.⁷⁹

If degree of preparation and the organization of production and distribution were not the variables that made for the presence or absence of the strange lethargy, one wonders what the important differences between Jamestown and the other colonies were One variable may have been the strength and organization of the neighboring Indians Jamestown was settled in the domain of the "Great Emperor Powhatan," whose overlordship of more than thirty tribes enabled him to evolve and carry out a policy designed to prevent the English from establishing themselves as the greatest power in tidewater Virginia ⁸⁰ Neither the Roanoke colony nor the New England plantations faced Indians of comparable strength The Roanoke area Indians were organized into small tribes and were forced into compliance with English demands by Lane ⁸¹ In New England, the tribes in immediate contact with the settlers were split by serious rivalries ⁸² Furthermore, Indians of the coastal area of New England had been disastrously weakened by European diseases, many of which took their toll before colonization Cushman, writing in 1622, estimated that "the twentieth person is scarce left alive " Modern estimates of deaths for the seventeenth century among Indians run as high as 75 percent to 95 percent ⁸³ The degree to which the safety and integrity of the various colonies were threatened by the organization and determination of the Indians on whom they intruded may have been a powerful element in colonists' psychological well-being

Contemporary observers knew without question the important variables in the strange deaths at Jamestown lack of proper discipline and good government Smith felt the point had been proven by the fact that such deaths did not occur under his presidency Again, the experience of the other colonies seems to reinforce the point Lane maintained a harsh military discipline at Roanoke ⁸⁴ Larzer Ziff gives a vivid picture of the internalized discipline of the New England settlers and their sense of commitment to a common goal that made them work for the success they required "Strangers" among New

⁷⁸ Bradford, *Of Plymouth Plantation*, 77-78, 84

⁷⁹ John Smith, *New Englands Trialls*, in *Travels and Works of Captain John Smith*, ed Arber and Bradley, I, 260, Smith, *Advertisements for the Unexperienced Planters*, II, 943, and Smith, *Generall Historie*, II, 782

⁸⁰ Nancy Oestreich Lurie, "Indian Cultural Adjustment to European Civilization," in *Seventeenth-Century America Essays in Colonial History*, ed James Morton Smith (Chapel Hill, 1959), 33-50

⁸¹ Quinn, *England and the Discovery of America*, 303-04

⁸² Alden T Vaughan, *New England Frontier Puritans and Indians, 1620-1675* (Boston, 1965), 55-56, John R Swanton, *The Indian Tribes of North America* (Washington, 1952), 31

⁸³ Cushman, *Sermon Preached at Plimmoth*, sig A3, Sherburne F Cook, "The Significance of Disease in the Extinction of the New England Indians," *Human Biology*, LXV (Sept 1973), 499, 501, 505, and Francis Jennings, *The Invasion of America Indians, Colonialism, and the Cant of Conquest* (Chapel Hill, 1975), 28

⁸⁴ Quinn, *England and the Discovery of America*, 302

England settlers were expected to conform to the pattern of work and community life in which the governing Puritans, including the Pilgrims, believed⁸⁵

Modern captivity experiences offer similar "control groups" that did not succumb to the problems they faced. Turkish prisoners in Korean War camps are said not to have died of fatal withdrawal as American prisoners did. The reason is familiar: the Turks were allowed to keep their military organization inside the camps. Enlisted men were not isolated from their officers, the chain of command and its discipline were kept intact.⁸⁶ Removal of American officers from their units, and finally removal of noncommissioned officers, was a deliberate tactic to produce disorientation.⁸⁷ If the discipline maintained by the Turks parallels the discipline and relative good health under the military command of Lane or Smith, perhaps the example of the Jehovah's Witnesses in German concentration camps in World War II offers a parallel to the inner discipline and integration of the Puritans of Plymouth colony. Bruno Bettelheim says the Jehovah's Witnesses "kept their integrity thanks to rigid religious beliefs." Furthermore, they were "the only group of prisoners who never abused or mistreated other prisoners."⁸⁸

Life in the early colonies and in the prison camps of Korea and World War II represented extreme stress situations. Psychologically, the stress consisted of a sense of isolation and lack of control over one's movements and destiny, both of which combined to produce profound despair in some people. Perhaps belonging to a tightly constructed group, whether militarily or religiously based, may have forestalled the despair because it lessened the feeling of isolation and the feeling that no one would care or notice if the individual ceased to exist. The needs of the group provided daily challenges, and solving them may have made the marginal difference between withdrawal and involvement.

Physically, the stress of being a colonist or a prisoner stemmed from malnutrition, which led to pellagra, beriberi, scurvy as well as protein-calorie malnutrition, or a combination of these. These nutritional-deficiency diseases weakened the resistance of the colonists and prisoners to infectious diseases, such as malaria and dysentery. More importantly, the nutritional-deficiency diseases interacted with the psychological effects of isolation and despair and each intensified the other. Observers in Virginia and in prison camps in the twentieth century both remarked that people died who were not mortally ill, that they seemed to die of despair, and that often they refused to do the elementary things necessary to save themselves. This strange but widespread observation can be explained by the conjunction of the psychological effects with the symptoms of the deficiency diseases. All the nutritional-deficiency

⁸⁵ Ziff, *Puritanism in America*, 27-48, Bradford, *Of Plymouth Plantation*, ed. Morison, 188.

⁸⁶ Kinkead, "Study of Something New in History," 147-51, White, *Captives of Korea*, 84-86, 94-96. Defenders of the American record point out that the Turkish captives had the *esprit de corps* of a small elite unit and that the language barrier kept the captors from trying to indoctrinate them as they did the Americans.

⁸⁷ Peters, "More on Our POWs," 38-39, Eugene Kinkead, "Letter," *Reporter*, March 5, 1959, p. 8, Schein, "Epilogue: Something New in History?" *The Journal of Social Issues*, XIII (1957), 60, and Biderman, *March to Calumny*, 161-62.

⁸⁸ Bruno Bettelheim, *The Informed Heart: Autonomy in a Mass Age* (New York, 1960), 122-23.

diseases cited are characterized in their early stages by loss of appetite, apathy, weakness and fatigue, cramps, and loss of function in the extremities. These symptoms offer a significant explanation for the observed symptoms of dying prisoners and colonists—their refusal to get out of bed, their unwillingness to eat the food that was offered them, and their apparent decision to die rather than to go on fighting their environment. On the other hand, the observers, most convincingly the medical doctors in World War II and Korean War prison camps, unanimously agree that fatal withdrawal was not simply a result of physical causes. People with symptoms of malnutrition sometimes lacked all symptoms of despair, and many with no discernible symptoms of nutritional diseases exhibited all the symptoms of despair, such as apathy, loss of memory, and irritability. What is important is that the psychological and the physical causes could reinforce each other. Anorexia, whether from physical or psychological causes, would lead to more severe malnutrition if the patient failed to eat. Apathy from malnutrition would contribute to a mental state of despair about the future.

Early modern observers thought the strange deaths in Virginia were purely psychological, that they were caused ultimately by character defects in those who died. Examples from twentieth-century prison camps offer not only the chance to understand the nutritional basis of some of the symptoms, but also to see that nutritional diseases are characterized by symptoms that appear to be purely psychological. The colonists' unwillingness to help themselves, their surrender to melancholy, resulted from the complex interaction of environmental and psychological factors.