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# Part I.—Original Articles.

## CRIME, SENESCENCE AND SENILITY

By W. Norwood East, M.D., F.R.C.P.

Special Consultant to the Royal Navy; formerly H.M. Commissioner of Prisons, etc.

In recent years authoritative opinion in this country has decided that aged persons are less suited for magisterial duties in a juvenile court than justices who

are younger.

In 1927 the Departmental Committee on the Treatment of Young Offenders reported that: "Most Magistrates are not appointed until they have reached middle age, but the service of the juvenile court demands younger recruits, and special attention should accordingly be paid to considerations of age." In 1935 the late Lord Hewart, when Lord Chief Justice of England, approached the subject circumspectly in the Second Clarke Hall Lecture. He said: "Is it not desirable that magistrates in these juvenile courts should be of parental age, varying from forty to sixty, rather than of the grandfatherly period that runs from sixty to a happily distant future?" A Home Office Circular, in 1936, was more emphatic and declared that: "Apart from the obvious advantages attaching to quickness of hearing and of sight in a justice, there is the fact that as time goes on men and women justices are apt to lose the freshness of mind and sympathy and the up-todate knowledge of social conditions which are of extreme importance for successful work in the juvenile courts. Where it is a choice between two otherwise equally good candidates for the panel much, or indeed everything, is to be said for selecting the younger of the two.

These views recall the fact that intellectual and emotional contacts are often most fruitful among contemporaries, and understanding between the offender and his judge is most likely to be established when the experiences, temptations and hazards of the one are not too remote from those of the other. They also suggest that the younger magistrates may not be the best fitted in some respects to adjudicate when aged persons commit offences, since few have expert knowledge of the problems and mental functioning of elderly persons, and few have time or inclination to study the matter. Moreover, contacts with aged relatives and acquaintances often provide only a restricted and sometimes biased estimate of the mental background of the sexagenarian in our midst. For, even if we accept the view that the psychological mechanisms of childhood and senescence often differ little from one another, the medical and social settings of the two extreme periods of life are widely dissimilar. It is also necessary to recognize the fact that senescents are as much individualized as persons at other ages, and that their emotional lives

sometimes receive less consideration from others than they deserve.

For obvious reasons the trial of aged persons by their contemporaries may be unsatisfactory, and since age itself is not necessarily a true measure of senescence or senility, using the word senescence for the normal process of growing old, and senility for the abnormal mental states which sometimes supervene towards the close of life, it seems worth while to consider a little the manner of thought and

behaviour of the aged.

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The subject is of more than academic importance. Prof. Bowley, calculating the population of Great Britain on the hypothesis that the annual number of births is the same as in 1921-23, the death-rates are the same as in 1910-12, and that there is no emigration, assesses the percentage of the population aged 65 and over as 6 in the year 1921, 7 in 1931, 8½ in 1941, 9 in 1951, and 10½ in 1971, 1991 and 2011. He estimates the percentage of the population aged 15 to 65 during the same years at 66, 68, 67, 67, 66, 66, 66, so that the future wage-earners will have to support an increasingly large number of non-effectives over the age of 65. It has been suggested, elsewhere, that by the year 1961, the number of persons of pensionable age (65 in men and 60 in women) will be over 8,000,000, or 1 in 6 of the population, whereas at the beginning of the century it was 1 in 17.\* Williams, Quesnel, Fish and Goodman state that the number of persons over 65 years of age in the population of the United States of America has shown an increase of 35 per cent. in the decade 1930-1940.

The size of the problem of criminality in aged persons to-day is also important. During the ten-year period 1929-38 there were 13,937 persons aged 60 and over who were found guilty of indictable offences at assizes, quarter sessions and courts of summary jurisdiction (Table I). Of these, 11,430 were males and 2,507 were females. This not inconsiderable total is smaller than the totals at other age-periods given in the Criminal Statistics and abstracted in Table I without separating the sexes. The figures accord with the well-known fact that the incidence of crime per 100,000 of the population of the age or age-groups consistently decreases after thirteen as age advances. The figures are only approximate and do not, and cannot, serve as exact guides to the ages of the offenders responsible for the total volume of crime known to have been committed, since some offenders are never caught, and others, especially the rather older and more experienced, commit whole series of offences, but only figure once in the tables of personal particulars. On the other hand, the same offender may commit more than one offence in the same year and figure more than once in the number for that period.

The figures in Tables I and II do not include the large number of offenders who were found guilty of non-indictable offences in courts of summary jurisdiction. The Annual Reports of the Prison Commissioners, however, show in relation thereto that in the years 1929—38 of 4,689 males of all ages convicted and imprisoned for indecent exposure, 381, or 8 per cent., were 60 years of age and over, and that of 48,710 males of all ages convicted and imprisoned for offences against the Intoxicating Liquor Laws—drunkenness—8,001, or 16 per cent., were 60 years of age and over. In a recent study Arieff and Rotman found in 100 unselected cases of indecent exposure from the Municipal Psychiatric Institute at Chicago, 6 men were of the age 61–90.

TABLE I.—Total Persons Convicted of Indictable Offences, including those against whom Charges were Proved and Orders made without Conviction.

Year.	Total found guilty.		Number of persons at different ages.								
		Under 14.	14-21.	21-30.	30-40.	40-50.	50-60.	60 and over.			
1929	53,322	6,380	15,226	13,529	9,159	5,321	2,436	1,271			
1930	56,766	6,863	17,061	13,989	9,374	5,526	2,607	1,346			
1931	59,366	7,587	17,386	14,761	10,075	5,694	2,569	1,294			
1932	64,958	9,014	18,875	16,481	10,746	5,696	2,777	1,369			
1933	62,660	9,743	17,176	15,576	10,574	5,573	2,644	1,374			
1934	65,736	11,645	18,403	15,344	10,561	5,589	2,827	1,367			
1935	69,849	13,873	20,637	15,199	10,508	5,571	2,640	1,421			
1936	72,785	14,459	21,681	15,467	11,143	5,806	2,803	1,426			
1937	77,529	16,413	23,080	15,974	11,551	6,024	2,967	1,520			
1938	78,463	15,559	24,008	16,392	11,929	6,063	2,963	1,549			
Totals	661,434	111,536	193,533	152,712	105,620	56,863	27,233	13,937			

A marked reduction in the crime rates of elderly persons is not peculiar to Britain. Van Vechten has recently given the following commitment rates per 10,000 male persons in the United States of America: at all ages, native-white 11, foreign

<sup>\*</sup> Art., "Old Age," The Times, February, 25, 1944.

born 5; at age-period 60-69, native white, 1.8, foreign born 1.4; at age-period 70 and over, native-white 0.7, foreign born 0.4.

The Criminal Statistics of England and Wales are not immediately concerned with the medical aspects of crime, and the age-grouping above the age of 20 is set out in decades, the oldest group being "60 and over." Nevertheless, looked at broadly, certain features of interest appear from a consideration of the figures in Table II, although the official list of felonies and misdemeanours referred to in the Criminal Statistics are not given in detail. For the purpose of this study, the offences are considered in groups A, B and C of Table II according to the main instinctive activity which appears to be related to the crime. Other offences are not dealt with in this table, as they bear little relation to each other. At the same time the defects of this manner of classification must be admitted since, for example, murder or theft may be due to the aggressive, sexual, acquisitive or parental instincts.

Table II.—Number of Persons Found Guilty of Certain Indictable Offences, 1929–1938.

A. Acquisitive Offences and (in	hrac	kets) bl	lace is	970	ut.		
Offence.	y. <del></del>	, p.		. 8	Under 60.		60 and over.
Burglary					3,340 (4)		64 (4)
Housebreaking .	•	•	•	•	9,064 (3)	•	132 (2)
Shopbreaking	•	•	•	•	16,862 (2)	•	112 (3)
Attempt to break and e	nter	houses	etc	:	1,008 (7)	•	16 (7)
Entering to commit a fe	lons	110u3w	,	•	2,763 (5)	•	57 (5)
Possession of housebrea			•	•	1,444 (6)	•	35 (6)
Robbery	KILLE	tools	•	•	736 (8)	•	I (8)
Larceny, embezzlemen	• •	forgery	fra	nd.	/30 (0)	•	1 (0)
receiving, coining, etc				uu,	532,979 (1)		10,896 (1)
tootiving, comming, ou	• •	•	•	•	3341979 (1)	·	
Totals .	•	•	•	•	558,196	•	11,313
B. Sexual Offences and (in brace	kets)	place i	n gro	up.			
Unnatural offences.					316 (9)		19 (9)
Attempt to commit unn	atur	al offen	ces		471 (8)		35 (7)
Attempts to commit un	natı	ral off	ences	on			
males under 16 .					1,675 (3)		133 (2)
Indecency with males					861 (6)	•	68 (3)
Rape					272 (10)		8 (io)
Indecent assaults on fem	iales				895 (5)	•	56 (5)
,, ,, ,,		under	16		6,960 (I)		848 (1)
Defilement of girls under	13	to 16			1,534 (4)		58 (4)
Incest					494 (7)		27 (8)
Procuration					96 (11)		2 (11)
Abduction					41 (12)		``
Bigamy	•	•	•	•	2,524 (2)	•	44 (6)
Totals					16,139	•	1,298
c. Aggressive Offences and (in br	acke	ts) plac	e in g	roup	·.		
Murder					179 (6)	_	10 (5)
Attempt to murder		•	•		113 (7)		10 (5)
Manslaughter .					456 (4)	•	18 (4)
Infanticide			-	-	111 (8)	•	10 (4)
Felonious wounding					708 (3)	•	29 (3)
Malicious ,, .		·			9,252 (I)	• •	409 (2)
Assault			:		376 (5)	•	12 (7)
Attempt to commit suici	de	•			4,895 (2)	•	554 (I)
•	-	•		-		·	334 (1)
Totals	•	٠.	•	•	16,090	•	1,042

Table II shows that the frequency of the acquisitive, sexual and aggressive offences occur in this order in offenders under, as well as in those over, 60 years of age. Table IIA shows that the frequency with which the different acquisitive offences occur in persons under and over 60 are the same in the two groups, except that in persons over 60 housebreaking is more frequent than shopbreaking. Many

factors enter into the matter, and the change of position may be associated with the fact that as age advances enterprise and audacity tend to decrease.

At the same time it must be acknowledged that stereotyped patterns of behaviour exercise an important influence on the lives of many, so that, for example, the earning of money at first undertaken for a particular reason becomes so firmly established that the desire to accumulate wealth continues long after its original purpose has been achieved. Acquisitiveness also seems to be strengthened in persons who estimate their social value by the extent of their riches and not by what they have done to benefit society. This idea may persist even when their position and treasures have been illegally obtained, and their value to the State is no greater than that of any other fraudulent criminal. Arrogance of this sort is sometimes found in aged persons who are convicted of fraud and other acquisitive offences, and appears to be more a habit of mind than a temporary defensive reaction

Cameron reminds us that in the nineteenth century there was a fairly widely held belief to the effect that an active sexuality was associated with probable longevity, and that recent animal experimentation has not tended to support this view. In the sexual offence group, Table IIB, the relative positions of bigamy and indecency with males in the two age-groups are, perhaps, not without significance. It may be that the lessened wage-earning capacity of the aged offender minimizes his opportunities, and his waning physical powers reduce his desire to commit bigamy. So, too, the relative frequency of indecency with males committed by men over 60 may indicate their unattractiveness for the average woman, and express a regression to an earlier stage of sexual development. Sexual offences in aged men are often due to the fact that phantasy and desire have outlived potency. It is notorious that in these cases sexual satisfaction may be obtained by indecent exposure, or by offences against children, and occasionally by such indirect methods as sending indecent letters through the post. Ruskin found an increased tendency toward committing such offences as exhibitionism and paedophilia by seniles and arteriosclerotics to an extent which comprised 60 per cent. of the total offences of psychotics of this group. A further matter of practical importance is the fact that offences often tend to occur in a comparatively early stage of mental deterioration, and must be differentiated from those which are due to the continuance of a long-established habit into old age.

Diethelm and Rockwell note that sexual desires which have been under control or repressed during adult life seem to become stirred up and threaten security in many people during the fifth decade. They found that the patients over 45 years of age who were admitted to a psychiatric clinic and presented sexual psychopathology had shown a greater or lesser degree of it during adult life. Among ambulatory patients who suffered from a minor psychopathological disorder, these authors found that sexual tendencies which were either accepted or controlled by the individual and which were not of pathological intensity might increase in intensity in the fifth decade, and became a source of annoyance or worry.

Moore refers to the studies of Lange, Rössle, and Hammond. Those of Lange indicate the fact that about half of the married men not older than 25 or 30 years, when a bilateral orchidectomy is done, continue to have a normal libido and potency. Rössle states that, in a series of 125 men, castrated under the German law for criminal sex offences, libido was weakened in approximately one-half of the cases. In seven men studied by Hammond castration after sexual maturity did not abolish libido. Moore concludes that the evidence suggests that in men in whom the psychic and neuromotor behaviour patterns of sexual activity have been established, complete loss of the testes does not necessarily prevent participation in sexual activity.

In the group of aggressive offenders (Table IIc) attempts at suicide occupy the first position in persons over 60. This accords with the fact that depressive thoughts are often in the forefront of the minds of the aged, and attempts at suicide occur in spite of knowledge that natural death will shortly accomplish the same purpose.

The Criminal Statistics for 1928 give the number in age-groups of persons over 16 convicted of murder in the quarter century 1904–28. They are given in Table III. The figures for women are complicated by the fact that after 1922 juries were able to return a verdict of infanticide instead of murder, and are ready to return special

TABLE III.—Age at Time of Murder.

A. Men and Youths.

Age-groups	and	(in	brackets	;)	percent	age	of	total.	•

		_						<u> </u>						
Years.		16-21.		21-30.		30-40.		40-50.		50-60.		Over 60	<b>.</b>	Total.
1904-1908		13		42		31		21		11		4		122
1909-1913		8		49		35		21		9		3		125
1914-1918		4		25	٠.	18		15		12		4		78
1919-1923		9		38	•	26		17		16		3		109
1924-1928	•	9	•	50	•	24	•	16	•	7	•	I	•	107
Totals .		43 (8)	)	204 (3	8)	134 (2	:5)	90 (1	:6)	55 (10	o)	15 (3	3)	541
					в.	Women	and	Girls.						
1904-1908		I		6		I		I		_		1		10
1909-1913		1		II		3		2		I		_		18
1914-1918		1		11		4		· I		I		1	:	19
1919-1923		5		21		6		2		_		_		34
1924-1928	•	20	•	35	•	11	•	2	•	-	•	-	•	68
Totals		28 (19) 84 (56) 25		25 (1	7)	8 (5	;)	2 (1	+)	2 (1	+)	149		

findings or verdicts of insanity in favour of an accused woman. But both sets of figures reflect the moderating influence of time on crimes of passion.

Figures from Broadmoor Criminal Lunatic Asylum (Table IV), kindly supplied by Dr. J. S. Hopwood, show that the proportion of homicides over the age of 60 compared with those under 60 is in round numbers 1 to 14. The proportion among sane murderers is 1 to 18 (Table IIc).

E. Frankel found the percentage commitment rates by nativity and age in 1,000 murderers committed to the New Jersey State Prison also showed a small proportion of homicides in the older age-groups, whether native white, foreign born or negro:

	Under 20.	20-24.	25-29.	30-34.	35-39.	40-44.	45-49.	50-54.	55-59.	60-64.	over.
Native white											
Foreign born	3.4	14.9	17.8	19.3	15.1	11.0	6.5	5.2	3.1	2.4	1.3
Negro .	8 · 1	16.8	18.2	20.2	14.5	9.4	5.4	5.4	1.0	0.3	0.7

The Criminal Statistics for 1928 considered the incidence of crime by age in the years 1911 and 1928. The age-groups of males over 60 in 1928, the youngest of whom were aged 46 in 1914 when the first Great War began, suffered relatively

TABLE IV.—Offences and Ages of Admission to Broadmoor April 1, 1923-March 31, 1943.

Age-groups (M. = males, F. = temales).

Offences. Total. Murder . 16 86 58 119 548 Attempted murder 30 10 32 164 Manslaughter 2 3 16 Wounding I 21 III Sexual 12 16 11 6 50 Acquisitive 2 2 36 I 21 I 192 Arson 43 Other offences 2 208 Totals 66 305 117 6 912 males 259 females

134

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Grand totals .

very little from war losses, and benefited from the prolongation of life which is so conspicuous a feature to-day. The group numbered nearly 600,000 more in 1928 than in 1911, yet the convictions for indictable offences fell from 1,009 to 709, and the incidence per million fell 52 per cent. This great reduction must indicate some decrease in crime. The incidence of convictions per million living males in the various groups was as follows:

The elderly, aged		∫Over 60	percentage	fall 52
The elderry, aged	•	ე 50–60	,,	31
Men of war age		{40-50 30-40	,,	30
men or war age	•	₹ 30–40	,,	22
Between war age		∫21–30	,,	18
in 1914–1918	•	16−21	,,	22

The general inference appeared to be that the elderly profited most, morally and materially, by generally improved social conditions, and in particular by the prospect or receipt of old age pensions. It is relevant to note here that before the introduction of old age pensions, many elderly men and women voluntarily declared that they had deliberately committed offences in order to obtain the privacy, protection and shelter of a prison, and escape from the quarrels and interferences they were unable to avoid in the associated life of the Poor Law Institutions of those days.

During the period 1911 to 1928 the decrease in the incidence of indictable crime per million of the age-groups was greater in men over 60 than in any other adult age-group in each official main class of crime, except forgery and offences against currency. In the year 1928, however, there was a large increase in the incidence per million in the age-group 50 to 60 as compared with the year 1911 for obtaining by false pretences, frauds and receiving, etc., although all other official groups of indictable offences showed a diminution at this age-period.

Acquisitive offences are often committed by professional criminals, many of whom in course of time figure in the older age-groups. Thus, a man born in 1882 was first convicted in 1897 for theft, and had been convicted 15 times by the year 1930, when he was sentenced for forgery for the fifth time.

In 1929 the North of England had been suffering acutely from industrial depression, but the percentage to total numbers of indictable offences committed by men over 60 years of age was 2·1 in the North and 2·8 in the South of England. The general effect of a series of tables in the Criminal Statistics for that year showed that the industrial depression in the North had not made the incidence of crime among men aged 30 higher in the North, and at many points it was lower than in the South of England.

I have stated elsewhere that clinical experience suggests that in many cases as one gets older personality seems to be a more important crimino-genic factor than environment. In young and middle-aged persons a first offence is only occasionally an early indication of mental abnormality; in elderly persons it should at once arouse doubts as to whether it is the result of senile degeneration. Repeated offences at all ages may be due to a minor mental abnormality, or to the formation of an acquired habit, and records show that this may arise in early life or later. Thus, a man born in 1862 was first sentenced to three months' imprisonment for theft in 1882. In 1930 he was sentenced to three years' penal servitude and six years' preventive detention for receiving stolen property and being a habitual criminal. In the interval he had been convicted for stealing, housebreaking and the like on 25 occasions, and in addition to many short sentences had received eight sentences of penal servitude and one of preventive detention. Another man born in 1861 was unconvicted until 1898. In 1929 he was sentenced four times to penal servitude for three years, the sentences to run concurrently and to be followed by seven years' preventive detention as an habitual criminal. He had been convicted on 17 other occasions for theft, burglary and similar offences, and had served four previous sentences of penal servitude and one of preventive detention.

The Annual Reports of the Prison Commissioners for the ten-year period 1929-38 show that of convicted prisoners received into prison for indictable offences, non-indictable offences akin to indictable offences and other non-indictable offences, whose ages were 21 years and over, 304,384 were under and 27,128 were over the

age of 60, a proportion in round figures of 11 to 1. During the same period 207 offenders between the ages of 21 and 60 were sentenced as habitual criminals to preventive detention under the provisions of the Prevention of Crime Act, 1908, Part II, a proportion of almost 5 to 1.

All the witnesses who gave evidence before the Departmental Committee on Persistent Offenders and had experience of Part II of the Prevention of Crime Act, 1908, agreed that the existing provisions were unsatisfactory. The fact that so few cases have been dealt with under the provisions show that they are usually recognized to be ineffectual for the purpose for which they were intended. Nevertheless, the figures quoted above suggest that there is some association between recidivism and the later period of life; that, in fact, many habitual criminals are undeterred by age from committing crime. If the proposals in the Criminal Justice Bill, 1938, are accepted, whereby courts are to be enabled to pass sentences of preventive detention in lieu of, but not in addition to, sentences of penal servitude or imprisonment, the age-incidence of those so sentenced should be instructive.

There would seem to be almost no upper age limit to crime. Arado refers to a woman aged 82 who was then sentenced in America to 14 years' hard labour. She had been before the courts 30 years before for criminal abortion. Septuagenarian women abortionists are not uncommon in this country. As one of them remarked: "You do not need your eyes to work down there."

So far the general criminal population in prisons has been considered. Goring analysed the age-incidence of 682 first offenders convicted of serious offences and awarded sentences of penal servitude. He found the cases centred around three distinct age-periods: A period of adolescence and early manhood, rising rapidly to, and falling rapidly from, its culminating point, which occurred between the ages 20 and 25; a more protracted and less emphatic middle age-period, rising and falling less rapidly to and from a point of maximum intensity which occurred between the ages of 35 and 45; and a transient period between the ages of 60 and 65 when an exacerbation occurred in an otherwise rapidly diminishing tendency towards crime.

In a recent\* group of 9,197 prisoners of both sexes in the prisons of England and Wales convicted of various offences, 290 were aged 60 years and over. Of these 71 were first offenders and 194 had been previously convicted three times or more. The elderly offender is often the professional criminal at the close of his career, and viewed generally official statistics throw little light upon the mental background associating crime with senescence and senility.

### SENESCENCE AND CRIME.

In his Goulstonian Lectures on "The Neurology of Old Age" Macdonald Critchley quoted Létienne, who "was bold enough to attempt a definition between senescence or healthy old age and senility; he states that in the former there are modifications in the organism which must not be looked upon as disorders; while in the latter there are actual alterations or lesions. Therapy is possible in the one he says, but impossible in the other. Critchley adds: "The inadequacy of this proposed definition is obvious, and I believe that no useful purpose is served by setting up artificial distinctions between the two states."

Nevertheless, in criminal situations the welfare of the community must be considered as well as the personality of the offender, and crisp views must be fashioned if possible regarding the anti-social potentialities of law-breakers. If, as many believe, growing old is as natural a process as growing up, and senescence is the counterpart of adolescence, it becomes a matter of practical importance to differentiate criminal behaviour which is associated with senescence, as a recent improvisation in the life-history of the offender or the continuance of a long established habit, from offences which are attributable to the functional or organic mental diseases of senility.

Rothschild and others have pointed out that there is no correlation between the intensity of mental symptoms in the aged and the severity of the ascertained pathological changes. Wartman found in 500 consecutive autopsies that 90 per cent. of the men and 85 per cent. of the women over 60 years of age had cerebral arteriosclerosis, although 90 per cent. of the men and 85 per cent. of the women

\* April 3, 1944.

did not show mental symptoms. Rolleston considers that the difficulty of determining accurately where physiological involution ends and pathological lesions begin has caused confusion between physiological old age or senescence and the pathological condition of senility. He observes that the exceptional occurrence of the ideal condition of physiological involution without any definite evidence of superadded pathological change is shown by the experience of Warthin, who in 30 years of pathological work saw only 25 necropsies of uncomplicated senile death. Rolleston believes that old age is almost always but relatively physiological. Critchley considers that clinical and pathological study of the nervous system in senility suggests that ageing is not entirely a simple physiological process nor yet an exclusively pathological state, but that both features are operative though their relationship cannot as yet be determined. Robbins, Watters, Eustis and others find it convenient to differentiate between physiological, normal, old age and pathological, abnormal, old age. Bleuler states that senility often becomes a disease only as a result of the sudden cessation of the ordinary attractions of life, and Cameron opened a series of social clubs in connection with a special clinic to overcome the social isolation of the elderly, and the part played by loneliness and lack of social contacts as causative factors in their breakdown.

If senescence is a physiological condition and not a pathological incident of life, difficulty arises when an attempt is made to determine its onset. If the menopause in women is of some assistance in the matter where they are concerned, it must be admitted that its analogue in men is likely to elude detection. Although Werner describes in men vasomotor, emotional and intellectual difficulties comparable to those seen in women at the climacteric, other observers remark upon the vagueness of symptoms in men. Engle observes that the number of patients in large clinics presenting a male climacteric syndrome is small indeed in relation to the number of women with such symptoms, or in relation to the number of men in the total population. Werner placed the male climacteric at the age of 50. Havelock Ellis thought it began at the age of 38. He quoted Kenneth Walker, who places the age of this change of life in men at 55 to 60, Max Thorek at 7 to 10 years later than in women, Rankin at between 57 and 63, and Max Marcuse between 45 and 55.

In considering the climacteric changes in men and women it must be remembered that the conditions are not strictly comparable. In men the change does not terminate the capacity for reproduction, which may be retained into advanced age. On the other hand, women at the climacteric realize that their reproductive activity is ending, and sometimes seem to forget that many remain sexually attractive for some years, and often are more mentally attractive than when they were younger.

The chronological age of the average person may be a misleading indicator of the onset of senescence. Stanley Hall puts this in the early forties, Watters at 55, Adami at 55, and Dublin at 65. Many will agree with Rolleston that in healthy people the onset of senescence is so stealthy that it is seldom suspected by the individual, and that one man may be senile at 60 years of age, whilst another is vigorous in both mind and body at 80. The onset of senescence is seldom obvious at first to others, and since the senescent is often unwilling and sometimes unable to recognize its early subjective indications, it is often well established before it is accepted.

Clouston observed, nearly 40 years ago, that there is a period of mental peacefulness, calm and health, with even a reasonable amount of energy of the right sort in many cases between the crisis of the climacteric and the beginning of old age. Those who look back to the beginning of the century and compare their elders of that time with their fellows of to-day may believe that as the span of modern life has lengthened, so has the onset of senescence often been delayed, although the process of growing old has not necessarily been affected in other directions.

Senescence has claimed attention throughout the ages. David's prayer, "When I am old and grey-headed O God, forsake me not," seems to anticipate the feeling of insecurity which is so apt to disturb the declining years of life. When wrathful Elihu replied, "Neither do the aged understand judgment," he acknowledged the inevitability of mental deterioration and echoed Job's belief in the omnipotence of God, "who taketh away the understanding of the aged." The deliberate scepticism of Koheleth, suggestive of the physician's outlook, portrays the final stage of life with unrivalled imagery in the well-known verses of the last

Chapter of Ecclesiastes. But as one reads in Ecclesiasticus, "how comely is the wisdom of old men," it is permissible to think that perhaps the present times are not less happy in this respect than were the days of Ben Sira.

Cicero, defending old age in his famous dialogue, declared that "old men who are reasonable and neither cross-grained nor churlish find old age tolerable enough . . . old age is respectable just as long as it asserts itself, maintains its proper rights and is not enslaved to anyone . . . the great affairs of life are not performed by physical strength, or activity or nimbleness of body, but by deliberation, character, expression of opinion. Of these old age is not only not deprived; but, as a rule, has these in a greater degree. . . . Old men retain their intellects well enough if they only keep their minds active and fully employed . . . the crowning grace of old age is influence. . . ."

Shakespeare's sure thumb-nail sketch of the physical signs of old age and his inimitable portrayal of the senile psychoses are well known. Sir Thomas Browne refers to "that stupid Symptom observable in divers Persons near their Journey's End, and which may be reckoned among the mortal symptoms of their last Disease; that is, to become more narrow-minded, miserable and tenacious, unready to part with anything when they are ready to part with all, and afraid to want when they have no time to spend."

It is not always wise, even if it sometimes seems to be desirable, to accept the standards of those around us. Osler wrote, "Insensibly in the fifth and sixth decades, there begins to creep over most of us a change, noted physically among other ways in the silvering of the hair and that lessening of elasticity, which impels a man to open rather than to vault a five-barred gate. It comes to all sooner or later; to some it is only too painfully evident, to others it comes unconsciously, with no pace perceived. And with most of us this physical change has its mental equivalent, not necessarily accompanied by loss of the powers of application or of judgment; on the contrary, often the mind grows clearer and the memory more retentive, but the change is seen in a weakened receptivity and in an inability to adapt oneself to an altered intellectual environment. It is this loss of mental elasticity which makes men over forty so slow to receive new truths. . . . ." He declared that, "As we travel farther from the East our salvation lies in keeping our faces toward the rising sun, and in letting the fates drag us like Cacus his oxen, backwards into the cave of oblivion."

Thus orientated, the senescent, perhaps, can truly assess the intrusions of the arrogant publicist, the posings of the unseemly exhibitionist, and the achievements of the honest scientist. Thus orientated, the senescent may wonder whether we do not become adapted to the idea of death by the discordant changes of an everchanging world, which disturb our equanimity, cause us to war against novel substitutes and lead us to think that, perhaps, after all, the cubists, crooners, irresponsible poetasters, jazz-band musicians and other freakish upstarts of our time serve a useful purpose in reminding us that "a satiety of life brings on the ripe time for death."

Many attributes of senescence may adversely affect the individual, and criminal behaviour may be due to an unexpected jolt to a tottering personality. When crime is associated with senescence, it is important to remember that ageing is not always a uniformly progressive and unobtrusive reduction of physical and mental power. A physical illness, grief or other severe emotional disturbance in an aged person may trouble the even tenour of life and quicken the rate of mental deterioration, but for some time this may escape remark, particularly if the quickening is of short duration.

However this may be, personal experience of senescents has never offered to me any instance in which physical and mental deterioration alternated in a manner at all comparable to the alternating periods of physical and mental development of childhood.

In criminal cases, when the police are unable to avoid delay in arresting a suspected offender, there may be special significance in the fact that in senescence the memory for recent events becomes impaired, and reminiscence prevails. The reasoning power does not necessarily become less, and often gains in strength and reliability until age is well advanced. Indeed, the wisdom of age, founded upon experience, is sometimes so impressive that it cannot be set aside lightly as an imaginary or ephemeral quality. And although intellectual resilience and the

receptivity for new ideas are weakened in senessence, and decisions are reached with less alacrity than formerly, there can be no doubt that the amount of crime in the later periods of life is diminished; in part by the fact that conduct is more influenced then by knowledge, reason and restraint, and is less affected by opportunity, emotion and the stimulation of the senses.

Essential competition is no longer a prominent factor in the lives of aged persons, and many are dependent upon the efforts of others for their well-being. They tend to become less acquisitive as well as less aggressive, and regulate their conduct accordingly. And although their altered sense of values may be in some degree defensive in character, it also often seems to be related to the fact that the demands of others upon them are fewer and less insistent, so that acquisitive, sexual and aggressive responses in social or antisocial directions are less inevitable and more easily controlled.

Perhaps one of the most outstanding evidences of senescence is the failure to command the attention and authority of former years. When an employer becomes for practical purposes the employee of his partner he may be exploited and forced unwillingly to take part in a fraud without fully understanding the implication of

his act. And he is sometimes left to face the consequences alone.

The question of employment in old age is important. Since the industrial worker is often wrongly placed, and finds frustration and unhappiness in his occupation instead of fulfilment and satisfaction, he is sometimes surprised in later years to find that work is a privilege, and that the longer a person remains at a well-chosen occupation the longer will he enjoy life and experience the satisfaction which, in general, opposes antisocial behaviour. Even in advanced old age the privilege of personal service to others can often be enjoyed, and many senescents remain younger in thought by utilizing their leisure in assisting their friends. On the other hand, when greed, selfishness, uncharitableness, laziness and other undesirable personal traits have been unchecked throughout life they may become more noticeable as age advances and unmasks them.

An additional reason for continuing to work as long as possible lies in the fact that although the emotional tone of the senescent is often lowered, old age can claim no immunity from anxiety and grief. When this comes it may prove overwhelming so that mental stability is only retained by the aid of labour, which is particularly effective in these circumstances if dedicated to an altruistic purpose. And whereas in earlier years a great sorrow may be resisted by the knowledge that it will be softened by time, even though the time be long, in old age there may be insufficient time in which to wear it down, and insufficient inclination to attempt to do so unless supported from without. Indeed, here as elsewhere throughout life, hard work is often the best antidote to grief and disappointment.

The significance of leisure is receiving increasing attention to-day from many thoughtful observers. It is often enjoyed mistakenly. Prolonged idleness corrupts and becomes irksome as well as harmful to the active-minded man, who may add cubits to his stature if he occupies his spare time with creative pursuits which

harmonize with his ambitions and abilities.

The senescent suffers from, or profits by, the increased leisure which is his portion in later years, and since his circle of friends inevitably shrinks it becomes important to select the method of recreation which is most appropriate for the individual. In youth recreation serves a two-fold purpose; first, as a relaxation from labour and as a revivifying factor in promoting further endeavour; and second, as a means of training by individual and team exercises for the stern realities of life. In middle age the main purpose of recreation is to re-create; in old age to delay decrement.

If the restricted power and poorer achievements of old age are wisely accepted as being inevitable, and are at the same time carefully exploited, the senescent may long continue to enjoy and profit by his former recreations. Happily, it often seems that intellectual or operational skill lasts longest where it has most attained success, and may even be extended in directions which have remained unexplored through lack of time or opportunity. Nevertheless, the age-groups in our everchanging modern world are still more or less segregated from each other, and the occupations as well as the amusements of aged persons become less social, less varied, more solitary and more proprietary than before. Unless the problem of leisure is treated with as much consideration in old age as it requires in youth and middle age an undesirable pattern of life may be adopted, and crime result

from a newly acquired habit of relieving tedium by alcohol, or some other timepassing appeasement.

With regard to both work and recreation, McDougall's warning that when we cease to strive we begin to die may be linked with his belief that it is better to die

living than to live dying.

To view old age, or any age-period in the life of the individual, in accurate perspective, it is necessary to consider it as a whole and avoid the appraisement of the intellectual, emotional and volitional qualities of the mind as isolated parts, since they overlap one another and are also influenced by external circumstances. This is apparent when a new project is introduced, for it not only requires to be perceived and understood in the light of intellect and reason, but it also excites an emotional response of satisfaction or dissatisfaction, and demands effort to make a decision for its acceptance or rejection. And just as in senescence the intellectual qualities of the mind may persist into advanced old age, so may the emotional qualities, and give rise to unexpected situations.

Intellectual reactions to the approaching end of life inevitably vary. Sir Thomas Browne said, "to learn to dye is better than to study the ways of dying." Thomas de Quincey wrote: "We should all think of death as a less hideous object, if it simply untenanted our bodies of a spirit, without corrupting them." Robert Louis Stevenson in his Samoan exile declared in the year before he died: "I wonder exceedingly if I have done anything at all good; and who can tell me and why should I wish to know? In so little a while I . . . will have ceased to be a memory; and yet—and yet—one would like to leave an image for a few years upon men's mind—for fun." McDougall, on the other hand, held that the desire for fame after death was the most irrational of all desires; and although a useful incentive for the young man was in old age foolishness, without mitigation of any kind.

Our social adjustments are largely affected by emotions which are apparent to others, but adjustment to the Infinite is often so elusive that it appears to be inconsistent to the onlooker. For example, the meticulous adherence to a high standard of moral conduct associated with a disregard for religious observance, or persistent evil-doing associated with fervent applications to Divine Authority,

are everyday incidents.

A reluctance to deal with the problems connected with adjustment to the Infinite is sometimes observed in youth, and even in middle age the matter may be postponed. But it becomes an ever-pressing concern to the aged. For some adjustment is in the making, and many attend church services to find spiritual satisfaction in religious communion, whilst a few turn to cults and idealisms for moral support. Still others, whose minds perhaps are more complex, doubting and analytical, with much toil find their adjustment in a bleak philosophy which, nevertheless, according to some thinkers numbers many among the best and happiest of men. Henry Maudsley, at the age of 82, wrote: "Of the two lights available for human guidance in the gloomy vale of tears, toils and fears is the faith the greater and reason the lesser light? That is the still disputed and unresolved question, which the optimist will continue to answer confidentially by the inspiration of feeling, the pessimist less confidently and more soberly, after his doubting fashion, by the dry light of reason."

This much seems certain, religion, animated perhaps by the emotional incitations of music and a chorus of amens, and undisturbed by criticisms of unproved assumptions, exercises a powerful influence on the lives of many. And if adjustment to the Infinite has been made on grounds which fully satisfy the truth-seeker, he may attain a mental peace which will serve him to the end. Religion, the unbroken link which unites the present with the past and is inherent in greater or less degree in all humanity, is one of our most important counterchecks to criminal behaviour. For although the obscurantism, errors and transgressions of some interpreters of doctrinal religion may offend us, there remains, and always will remain unharmed, a core of reality and truth which is universal in its application and abiding in its purpose. Even when adjustment to the Infinite excludes the tenets of orthodox religion, the very solemnity of the occasions when its principles are considered, and the tremendous issues involved, tend to establish a sincerity of thought and behaviour which opposes the commonplace amoralities of our time, and corrects the modern shift of interest from immortality to the urgent problems of the world about us.

The spectator viewing the emotional reactions of our modern world cannot fail to be impressed by the fact that not only sexagenarians and septuagenarians, but also octogenarians form romantic attachments which sometimes end in marriage. Those who have had opportunities to watch the progress towards, and the accomplishment of, such unions can have no doubt that their inspiration usually differs little from that of younger persons except in the physical content, which becomes in later years less important than its mental counterpart. Romance is encouraged by unusual circumstances, and the longevity of to-day, with its associated delay in the progress towards senescence, induces many understanding minds to believe that these unions are likely to become more frequent, and to regard them no longer with the disfavour of the lean-souled Victorian whose narrow point of view prejudiced his judgments on normality and abnormality in the sphere of sex. These alliances and their preliminaries cannot be omitted from our estimates of social and anti-social behaviour in the senescent of our day.

The tragedies of life are usually hidden from public view. So, too, the disappointments, regrets and painful memories which deepen the shadows in the mental background of the senescent who lacks equanimity and has too long delayed acceptance of the warnings handed down throughout the centuries:

"The Worldly Hope men set their Hearts upon Turns Ashes—or it prospers; and anon, Like Snow upon the Desert's dusty Face Lighting a little hour or two—is gone."

And again:

"I sent my Soul through the Invisible, Some letter of that After-life to spell: And after many days my Soul return'd And said, 'Behold myself am Heav'n and Hell'."

Indeed, memories are our most personal possessions, and may be our nearest approach to paradise or the pit. Men of outstanding sincerity write their records of the past in "marble memories which wear not out but with themselves." Others trace their painful recollections in the sea-washed sand, fearfully determined to rid themselves of the oppression. But the importance of memory was acknowledged by Lady Macbeth when she called it "the warder of the brain," and if the mental background of the senescent is to be clearly understood we must recognize the fact that his memories are significant, and may antedate by many years our own experience. Further, we must assess their value in the light of this limitation.

Yet it remains true that as the senescent looks back upon his unaccomplished tasks, he may derive a measure of comfort from the fact that sowers and reapers were differentiated one from another nearly 2,000 years ago, and that few may reap where they have sown. He may reflect that it can be a better thing to lay down stepping-stones upon which others may travel towards a worth-while goal than to construct a pathway which only leads to self-advancement.

In the field of criminology the action of the will may be considered as it is directed towards the discouragement of illegal acts which, in general, put the interests of the individual before those of society, and the encouragement of activities which are legal and useful to society, however strongly they may be opposed to the desires of the actor. And just as the intellectual and emotional attributes of the mind deteriorate in senescence, so does the power to will. A temporary or persistent exercise of will-power may be exhausting and is less frequently seen in the aged, although the negative will-power of obstinacy may be exaggerated. Will-power, forcing one to do what should be done in spite of personal wishes to the contrary, is necessary to attain a high level of accomplishment of course, but the senescent with a narrow self-regarding sentiment has usually reached towards the level of his desire, and failing this has often concluded that all is vanity, and that the effort required to gain the longed for end by an exercise of the will is out of proportion to the value of the offered prize. In practical situations the lessened amount of will-power which can be summoned, and the brevity of its duration, may indicate the degree of deterioration which is present if compared with the same qualities in former years.

Although the criminal law occasionally exploits an emotional situation, it is for

the most part concerned with facts and with reasoning. Forensic psychiatry, on the other hand, is mainly solicitous regarding the personalities and reaction patterns of mentally normal and abnormal men and women. As aged persons view the rapid passing of the years, they may well remember the wording of a memorable bulletin which told a tense public that the life of a very sincere and much loved man was "moving peacefully towards its close." If mental peace reward the later years of some, and even be our death-right, all do not attain it. And when the hitherto blameless senescent becomes involved in illegal behaviour, as the result of his mental deterioration, he deserves the fullest understanding from those who sit in judgment upon him. He may be denied this unless there is insight concerning the background of his mental life.

#### SENILITY AND CRIME.

Senescence then, apart from its physical concomitants, is characterized by a gradual lessening of the intellectual, emotional and volitional attributes of mind, whereby memory, perception, receptivity, attention, affection, interests and desires become restricted, less vivid and less compelling. It passes into senility when the impairment becomes excessive, the mental activities imperfectly synchronized, and when initiative, the ability to form well-considered opinions and sustained effort The patients are less concerned with fail and social maladjustment results. external events, they become increasingly egotistic, and their emotional life is impoverished. The death of relatives affects them little, although the outward expressions of emotion may be exaggerated. Dissatisfaction with their companions and surroundings marks the fact that the pleasures and obligations of former years have lost their appeal. Confusion of thought, a feeling of unhappiness or actual mental depression, disordered sleep, anxious forebodings concerning the present, and fears for the future, unwarranted distrust of others and suspicions regarding events, restlessness and resistiveness indicate the passing of normal senescence into abnormal senility, and suggest to the forensic psychiatrist the lines upon which he may shape his evidence in a criminal court.

It appears to be generally accepted that the reason senility develops in some persons and not in others depends in part upon their inherent constitutional makeup, and the degree of cerebral arteriosclerosis present, upon the stresses which they have experienced as well as the persistence of lifelong nervous symptoms, and indirectly upon their manner of life. It may be noted that in 100 patients suffering from psychosis with cerebral arteriosclerosis, Clow found that emotional disturbances were apparently by far the most frequent factors to upset their limited adjustment and precipitate a psychosis. Williams, Quesnel, Fish and Goodman consider that in senile psychoses social integration as well as financial independence have not been attained, or have been denied to the individual when most needed; and that preventive efforts would seem, to offer some return. On the other hand, psychoses with cerebral arteriosclerosis tend to strike down the individual in a manner similar to other disease processes, personal and situational factors being relatively insignificant. These authors consider that preventive measures in such cases must await more exact understanding of the morbid anatomy and physiology of the disease processes.

The practical difference between senescence and senility in criminal cases is measured in terms of social adjustability and the capacity to deal with personal problems as they arise. The term senility is restricted here to senile and arteriosclerotic dementias. Other modifications of psychiatric illness occurring in the ageing such as presbyophrenia, Alzheimer's, Pick's, Jakob's and Kraepelin's diseases, the dementias following chronic psychotic and chronic toxic states, those associated with chronic neurological disorders and the like need no special consideration in the present context.

Dayton has recently stated that psychoses of the aged now appear as the leading problems of psychiatry, with senile and arteriosclerotic disorders showing a higher incidence than all other psychoses combined. However this may be, when aged persons are implicated in criminal proceedings it is desirable to differentiate the above conditions from senile and arteriosclerotic dementia. This applies with particular force to the differential diagnosis of the depressive and manic varieties of senility from examples of manic-depressive disease in the aged, and, generally,

the possibility of a return to extra-mural social usefulness will be assessed in the light of the previous history of the offender.

It may be difficult to distinguish senile from arteriosclerotic dementia in persons accused of crime, not only because of the occasional overlap of symptoms, but if prolonged observation before trial is impracticable. Reference has already been made to the work of Rothschild. He compared the symptoms and post-mortem findings in 60 patients, of whom half were diagnosed clinically as seniles and half as arteriosclerotics. He found that anatomically pure forms of either were less frequent than combinations of the two, but one or other predominated as a rule, and clinical evidence of a mixed nature was less frequent than might have been expected from the clinical findings. The criteria usually accepted in clinical psychiatry were further established. Senile psychoses occur later in life, are gradually progressive and last longer, and paranoid patterns are more common. Arteriosclerotic psychoses have usually a sudden onset, and show less intellectual impairment, more fluctuation in symptoms and transient neurological signs. Rothschild cautions against labelling any type of psychosis as senile arteriosclerosis when it affects an elderly person. In a later publication dealing with 28 cases in which the diagnosis of arteriosclerotic psychosis was confirmed at the post-mortem, many discrepancies were found between the extent of the local damage and the degree of intellectual deterioration. For example, structural damage in patients with severe intellectual impairment was sometimes less marked than that found in patients with less serious focal lesions.

Discussing 31 cases of senile dementia and 29 cases of arteriosclerotic psychosis, Rothschild states that a lowering of moral standards leading to sexual irregularities, alcoholic excesses, or dishonest practices occurred in a few members of both groups, but this was commoner among patients with arteriosclerotic psychosis. The senile dementia group included 23 female and 8 male patients, and the arteriosclerotic group 22 male and 7 female patients, and it seems possible that the sex-ratio had some connection with the result. For, in general, men commit crime more frequently than women, the proportion, in round figures, being 8 men to 1 woman in England and Wales.

In the early stages of simple senile dementia crime is usually of a minor character, but serious crimes are rather frequently associated with the depressive, manic and paranoid varieties. In the depressive cases attempts at suicide are common, and homicide, often altruistic in purpose, is not infrequent. The manic variety is rarer than the depressive in criminal as well as in civil practice, and the offences are sometimes trivial in character. The paranoid variety seems especially liable to occur in people who are accustomed to view their contacts with suspicion, and hallucinations and delusions often give rise to crimes of violence.

The emotional importance of events long past and the comparative insignificance of a personal crisis was well shown by a man aged 65, during a depressive phase of senile dementia. He murdered the elderly landlady who was the wife of his friend in spite of the fact that she had befriended him. He belonged to the labouring class and had led a quiet, temperate, industrious and introverted life. He cut the woman's throat as the result of delusions which were inherently incongruous, but the jury refused to accept the medical evidence of insanity and he was sentenced to death. At the after-trial medical inquiry into his mental condition he was unconcerned at his position, but broke down and sobbed when he referred to a girl he had not seen since their engagement to marry was broken off some 45 years before on account of religious differences. His affection for the girl remained constant, and his memories of her affected him much more than the fact that he had killed a kind and hospitable woman and that his own life was in danger.

In addition to the depressive conditions associated with senile and arteriosclerotic dementias homicidal offences are occasionally, but less frequently, associated with manic, paranold and confusional states. In some cases acute or chronic alcoholic intoxication is a superadded feature, especially in cases of marital jealousy. Sullivan pointed out, and personal experience supports the view, that delusions of marital infidelity which result in crime are usually less absurd intrinsically in senile than in some alcoholic cases. The senile patient requires little proof to support his suspicions, which may be extravagant but, generally, are within the bounds of possibility. The alcoholic rationalizes affore elaborately and his beliefs are more absurd.

The slender grounds on which the delusions are based in senile dementia were apparent in a thatcher, aged 68. He shot his wife, aged 45, dead, in the mistaken belief that she had incestuous relations with her son, aged 20, and that she was pregnant in consequence. She was a sober, hard-working and respectable woman, and she called in a nurse as well as a doctor to examine her and convince her husband that she was not pregnant, but neither could persuade the homicide that his beliefs were false.

In matters involving criminal responsibility in the aged, regard must be paid, of course, to the fact that the conduct and mental condition of senile offenders should be compared with the standards of their former years as well as with the standards of so-called normal persons. Indeed, where mental abilities are strikingly superior in the prime of life, a perceptible amount of deterioration due to age may sometimes, in a criminal charge, escape recognition by a uninformed observer, who may regard the accused as above the average of intelligence and ability for his years.

#### Conclusion.

The mental background of the child delinquent, and of the adolescent and adult criminal, has rightly received increasing attention during recent years. Justice has been thereby assisted, and the reclamation of the offenders encouraged.

Although aged prisoners in this country have been for many years treated under a milder form of discipline than others, the mental background of the ageing offender before trial is also important, but has received less attention than is due, although the later period of life presents special problems to senescence and senility. The increasing recognition in modern days of the importance of studying the diseases of old age has enabled those who are concerned with the conditions which may affect criminal responsibility or medical culpability and treatment to view the aged offender more clearly, and these observations are intentionally discursive. For the aged offender must be regarded as a whole, and accurate estimates of his behaviour depend upon a synthesis of the physical, physiological, psychological, spiritual and psychiatric factors which operate in his special environment. My purpose is to insist that a knowledge of the mental background of the aged offender may suggest the most suitable way of dealing with him, and of protecting society from his misconduct.

Senescence will not acquit the offender of responsibility, although in advanced cases bordering on senility his mental condition may modify culpability to an extent which medical men believe, as a result of their experience of disturbed minds, should be taken into consideration by a court of trial in determining the award, because the degree of blameworthiness present lies somewhere between that which is attached to the illegal act of a mentally normal person and one who is irresponsible because of insanity.

• In early stages of senile or arteriosclerotic dementia, culpability according to medical standards may be modified; in advanced stages the accused may be properly considered insane according to the law. In all cases appropriate awards or treatment can only be selected by taking into consideration with other facts what the aged offender was, as well as what he is. His weaknesses demand our understanding; they may claim our sympathy if not our respect.

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