EADE PETER

COLLECTANEA DE DIVERSIS REBUS: ADDRESSES AND PAPERS

Peter Eade

Collectanea de Diversis
Rebus: Addresses and Papers

Eade P.

Collectanea de Diversis Rebus: Addresses and Papers / P. Eade — «Public Domain»,

Содержание

Peter Eade
Collectanea de Diversis
Rebus: Addresses and Papers

PREFACE

The following Addresses and Papers on various subjects have been selected from many others contributed by the Author, as thought to be possibly of sufficient interest in their respective spheres to justify their reproduction in a collected form. They are very diverse in their character, and embrace a great variety of topics.

It has been well said that all men are delighted to look back; and the Author, whilst thus recalling past work, can only express the hope that some of these Papers may have contributed, however infinitesimally, each in their own way and at their respective times, to help forward the appreciation of the then present, or the progress of the world's welfare or knowledge in the future.

Norwich, 1908.

I.
PROPOSED PROVISION OF RECREATION GROUNDS FOR NORWICH

Condensed Report of Speech in Norwich Town Council, 1880, reprinted from the *Norwich Mercury* of October 23rd, 1880: —

Dr. Eade, pursuant to notice, rose to call attention to the question of recreation or playgrounds for the children of Norwich.

He reminded the Council that four or five years ago, after some considerable talk with leading citizens, he ventured in the public Press to call attention to the deficiency which existed in Norwich in respect of recreation or playgrounds, and also of public baths. Ever since that time the question had, more or less, started up at intervals, while certain steps had been taken, which, in the course of time, would probably result in something being achieved. But, as time went on, the city was growing rapidly, open spaces were built upon, and he and those who were anxious to see something done were passing away. He had, therefore, taken upon himself once again to call attention to the subject, and to ask the Council to take action upon it.

After remarking upon the great importance now generally attached to questions affecting the public health, sanitation, or preventive medicine – for these were synonymous terms – and the intimate connection now everywhere recognised between the general welfare of the population of our great cities, and the absence of disease, with the consequent reduction in the death-rate, Dr. Eade said that it was entirely from the point of view of the public health that he wished to call attention to this subject. The physical growth, the physical well-being, and the physical development of the population formed a large branch of this subject; and he was afraid that, with regard to this, Norwich could not be said to be in the forefront of progress. Even since he first mooted the question many of the open spaces which he then believed available for the purpose had been built over or otherwise dealt with.

Norwich, once a city of gardens, was rapidly becoming a cramped and over-crowded city – at least, in its older portions; and in the new portions no provision was made for the physical welfare of the population, and no opportunities were given for the physical development of the children. Not in a single instance had a good wide roadway been opened up in the new districts; on the contrary, he was sorry to see in one or two of the most populous districts roads which ought to be great, wide thoroughfares, nothing better than narrow lanes. One most remarkable instance was Unthank's Road, which was being built up at the lower part where it was extremely narrow, so that instead of being made a great artery for the traffic of the city, it was converted into a mere lane, and it ought to be called Unthank's Lane – not dignified by the name of road.

No doubt before many years were over the city would have to incur a large expenditure in widening that and other roads. How short-sighted, then, was the policy of allowing such encroachments to go on!

To show what bearing these points had on public opinion long ago, Dr. Eade pointed out that even in Shakespeare's time the question was raised, as was seen in "Julius Cæsar." Mark Antony, in his speech to the citizens, first asks – "Wherein did Cæsar thus deserve your love?" and then the reply comes (by his Will) "To every Roman citizen he gives seventy-five drachmas;" and afterwards —

> "Moreover, he hath left you all his walks,
> His private arbours, and new planted orchards
> On this side Tiber; he hath left them you
> And to your heirs for ever; common pleasures,

To walk abroad and recreate yourselves."

Dr. Eade proceeded to say he wished there were Julius Cæsars at the present time desirous of making wills for the benefit of Norwich. He then quoted the opinions of Lord Shaftesbury and the *Lancet* as to places of public recreation and their influence upon the physical and moral welfare of the population, and added, that he fully agreed with the writer in the *Daily Press*, signing himself "C. I. T.," when he wrote – "The city expects the authorities to guard the health and lives of the humbler population at all costs."

Other towns had done and were doing that which he wanted them to do in Norwich. Towns as large as Birmingham and as small as Falmouth, had provided public parks, and many had more than one. Birmingham had seven parks and recreation grounds, Sheffield four, and Bradford three, while the latter town had lately spent £150,000 in carrying out what he was now advocating. Norwich had a population of 90,000, and was rapidly increasing and spreading on almost all sides – open spaces being constantly taken up for building purposes. Though they had playgrounds attached to School Board schools, he was sorry to find they were not available to the juvenile population – that they were only open to the children attending the schools during school hours, or a few minutes before and after school.

Norwich stood the very lowest on the list of the towns of England with regard to this question of recreation grounds. They had waited and waited until the difficulty of providing such places had greatly increased, while if they waited longer these difficulties would become almost insuperable. When he first started in this matter he could have found, or had the offer of, several open places, but those were now built over. He, at that time, took a great deal of trouble in the matter, but soon found that notwithstanding the support given him by several prominent citizens, it was far too large a matter for a single individual to carry through; but now he had the honour of a seat in the Council he claimed their attention, and, if possible, their powerful sympathy and support. They might ask where was the demand for recreation grounds. He asked those who had children to bring up whether they would allow them to play in narrow streets and crowded courts breathing impure air? What was the reason of there being so many puny, delicate, and small children? He ventured to say this was almost entirely due to the unwholesome surroundings in which they were brought up. He mentioned that in Glasgow recently, one medical man lecturing in that city said that in one year he had treated 330 cases of children with deformed bones – bent legs, bent thighs, knock-knees, etc. – which deformities were entirely due to the want of proper development and to their unwholesome surroundings. Much superior in many respects as Norwich was to Glasgow, he ventured to say that the same condition of things existed here. But the demand for places of recreation was, he contended, proved by the fact that whenever a plot of ground was cut up for building purposes, children crowded there from all parts of the city to play, and this they continue to do until driven away by the advance of bricks and mortar. Then, too, Chapel Field, when it was open, was often taken advantage of by 500 and 600 children and others, who went there for play and enjoyment.

After making other observations as to the need of such places, Dr. Eade said there were two ways in which the want might be supplied. Playgrounds could not be taken close to every door; but in every new district care should be taken to secure the setting apart of a certain amount of space for the children. One plan he would suggest was that at various points in the city a field should be purchased and thrown open to the children; and another plan was to purchase or hire a large space which might be converted into a people's park, with a small portion set apart for the use of children.

It might be said that such places would really be used by the rough portion of the population; but he contended that it was for just this portion of the population they were most required. Let the rough children be brought up to know the worth of fresh air, what it is to have healthy frames, so that in after life they may not be poor and puny and miserable. The very fact that the rough children of the poor would use these places was an argument in favour of their provision. A healthy body

meant not only a healthy mind, but a contented mind; and with recreation grounds for their use the children might be expected to grow up amenable to proper and right feelings, and in every sense better members of the community.

Believing as he did in the doctrine of *salus populi suprema lex*, he earnestly recommended the Council to take some steps in the direction he had indicated.

He concluded by moving – "That this Council, recognising the duty of providing recreation grounds for the children of Norwich, appoints a special committee to consider and report as to the best means of carrying out this resolution."

A Committee of the Council was then at once appointed.

Note. – At this date there were practically no public recreation grounds. At the present time we have the following: —

Mousehold Heath, 150 acres.
Chapel Field Gardens.
The Castle Gardens.
The Gildencroft.
Waterloo Park.
South Heigham, 6 acres.
The Woodlands Plantation (given by Mrs. Pym).
Lakenham and St. Martin's Bathing Places and Grounds.
Eaton Park, 80 acres.

Besides the numerous smaller spaces and churchyards which have been re-arranged and planted, and made both pleasing and (many of them) suitable for outdoor use or rest. For the promotion and carrying out of these, we are most largely indebted to Mr. Edward Wild, Mr. W. E. Hansell, and the Rev. J. Callis, with one or two others.

This and the next following Address were the outcome of the very strong impression produced upon the Author by observing the puniness or physical inferiority of much of the poor population with whom he had to deal as Physician to the Norwich Dispensary, when first coming to Norwich, as compared with that of the neighbouring country district where he had formerly resided. It appeared to him that want of outdoor exercise and the public-house habit were the main causes of this difference. And hence these two subjects of Recreation and Temperance at once engaged his attention, as they have continued to do ever since.

How such views have now developed, and also that of the necessity of good air and exercise for the young, in order to normal adult health and vigour, is patent to all.

II.
ON TEMPERANCE AND AIDS TO TEMPERANCE

An Address given at the Parochial Hall, South Heigham, in March, 1879, at a meeting held for the purpose of forming for the parish a branch of the Church of England Temperance Society, the Rev. J. Callis, Vicar, presiding.

Reprinted from the *Norwich Mercury* of March 5th, 1879.

The evils of excessive drinking are vast and widespread. As doctors, we are constantly being brought face to face with them – in injured health, in wasted life, in ruined homes. Much has been said, and will doubtless be said again to-night, on these points; and the desirability of a Temperance Society for this, as for other parishes, will be enforced. But believing that our object is to promote temperance in every possible way, I shall to-night allude to some of those social conditions which necessarily have a great bearing upon this important question.

Now, it is well known that much difference of opinion has existed as to the influence exerted by fermented liquors when taken in small or reasonable quantities, some thinking that in these small quantities they are pleasant and practically harmless; others holding that in no quantity are they either necessary or even free from injurious effects. Whatever may be the absolute truth of either of these opinions in reference to a limited use of these liquors, I think all are of one mind as to their pernicious effects when taken in any considerable quantity. All are agreed that drunkenness is a vice, baneful to the individual, hurtful to his friends; while doctors and physiologists are unanimous in asserting it to be positively proved that a too free use of them not only produces the outwardly injurious effects with which we are so familiar, but also gradually induces such degenerative disease of various internal organs as undermines the health and materially shortens the existence of the individual. With such a conflict of opinion still existing, our society wisely declines to decide that which science has been unable to settle, and opens wide her doors, and asks both these classes of thinkers to come in. She invites one section of her members to do no violence to their views of what constitutes temperance, or of the right way of influencing their neighbours. She merely asks them to join this society, and simply pledge themselves to practice and encourage that temperance as to which everyone may agree. But she tries to speak more mildly to those who are travelling in the well-trod road of Intemperance, which leads to mental and bodily ruin; and she entreats them to embrace the only means yet known which can save them from their destructive course. She asks them to pledge themselves to endeavour, by entire abstinence from the destroying drink, to save themselves from the miserable end to which they are hastening.

Speaking for myself and of myself, although a very moderate and small drinker, I am not an abstainer.[1] But though believing that many persons may take a small quantity of fermented liquor without being the worse for it, I also know that to many persons even a small quantity is more or less injurious; whilst as to others, I can but repeat what has been so often said before, and I do it with the greatest possible emphasis, that to many alcohol is a positive poison, unsuited to their temperaments, destructive to their health, and productive of the worst evils, both morally and physically. It is curious to notice, in passing, not only that the use of wine is alluded to through a large part of the Bible history, but also that the injurious effects of it seem always to have been precisely the same in character as those which are so much dilated on in the present day. Dr. Richardson, perhaps the greatest living exponent of the physiological properties of alcohol, and the greatest denouncer of its habitual use, speaks of its effects according to the increased quantities in which it is used. He describes its influence

[1] 1908. For the last five or six years I have practically been an abstainer, and my health has greatly improved in consequence. I am now eighty-three years of age.

thus: – "In the first stage of alcoholism," *i. e.*, in small quantity, he says, "it tends to paralyse the minute blood vessels, producing their relaxation and distension, illustrated by the flush seen on the face of those who have (in familiar language) been drinking, by the redness of the eyes and nose," etc., etc. This stage of excitement, he describes as being followed – if the quantity be increased – by some loss of muscular power, with disturbance of the reasoning powers and of the will; whilst again a further quantity produces a complete collapse of nervous function, when the drunken man, who previously, perhaps, had been excited, talking loud, and staggering in his walk, becomes stupid, helpless, and falls into a heavy sleep. And are we not all familiar with the quotations: – "His eyes shall be red with wine"; "Wine is a mocker; strong drink is raging"; "They are out of the way through strong drink, they err in vision, they stumble in judgment"; "They shall drink and make a noise as through wine"; "Who hath woe? Who hath sorrow? Who hath contentions? Who hath redness of eyes? They that tarry long at the wine." "At the last it biteth like a serpent, and stingeth like an adder."

Those who have taken the trouble to read Dr. Richardson's lectures on alcohol, will see that the effects of wine, as thus described long ages ago, are identical with those which he found experimentally to result from alcohol at the present day; and the redness of the eyes, the contentions and quarrelling, the loss of judgment, and the ulterior disastrous results to the health, spoken of in the infallible Word, are only too familiarly known at the present day. Nor let it be said that wine is not the beverage of the multitude at the present time. For this point has also been experimentally investigated by Dr. Richardson, and he found that whatever the alcoholic drink, or whatever the adulterations, the effect of these variations was insignificant, and that the real evil results of drinking were always due to the alcohol contained in the fermented liquors, whether these were wine, beer, or ardent spirits. But the subject of drinking and its evil influences, both physical and moral, has now been so long and so often placed before the public, that I shall gladly employ the short time left to me in alluding to some suggestions which have been made, with a view to assist in remedying the drinking habits of the people, and to enable them to wean themselves from these where no hope of voluntary or total abstention on a large scale can reasonably be hoped for. These suggestions have been very numerous. The first and most sweeping suggestion is the well-known one, which ignores every other consideration but the evil effects of the excessive use of alcohol, and proposes to get rid of drunkenness by rendering it impossible to get the drink. Legislation tending to this end was tried, as is well known, in America, under the title of the Maine Liquor Law, but its success has not been such as to induce other localities to follow the example. Again, systems of partial restriction, such as are known as the Gothenburg system, have been tried, or proposed, in the form of a Permissive Bill, such as has been advocated by Sir Wilfrid Lawson; but neither of these have commended themselves to the judgment of mankind as being the right solution of this question. The fact is social man and mankind constitute a large question. Over indulgence is not limited to the cravings of the stomach. Vice would not be eradicated by the simple removal of beer, however much assisted by it, and man would not be at once raised to the desired moral level were public-houses at once abolished. And so out of this conviction have arisen the various efforts which have been made, and are being persistently made, to attain, or assist in attaining, the wished-for results by more gradually acting moral means. These means, or aids to temperance, as I would call them, embrace several distinct influences, all of which such a temperance society as this is calculated to exert. They consist, primarily, in diffusing among the population, by meetings, by speeches, and by writings, a thorough knowledge of the personal evil which such habits necessarily and inevitably produce; (1) By bringing to bear the influence which friends and neighbours, so instructed, can exercise; (2) By forming public opinion and rendering it so forcible that the general mass of individuals must needs bow to its dictates; and, lastly, by these and all other assisting means, endeavouring to strengthen the personal control of self, and to make the individual himself contribute entirely to, not only his own good, but, by his improved example, to that of his neighbours and the community at large. I trust that through the force of public opinion

it will soon be thought by the working classes as vulgar and as low to get intoxicated, as it now is by those with more advantages of means and information.

Much has been said and written about the influence which *education* is likely to exert in the future upon the habits of the people. There can be no doubt, I think, that the influence which will be gradually so exercised will be very great. A mind trained to better things will abhor and revolt at the gross pleasure which it would otherwise have tolerated or enjoyed. And we all (I am sure) rejoice to see that education is being spread abroad in our land, and that the rising generation will all, in greater or less degree, have their minds trained sufficiently to prevent their slumbering in the lowest abysses of non-development, and to awaken them, and to lead them to the knowledge at least that there are better enjoyments in the human body and the human mind than the false and injurious excitement of incessant alcoholic stimulation. But, unfortunately, education is like a tree. It takes a long time for its development, and the circumstances of the time are too urgent to wait in dependence alone upon this agency. For all the while that we are talking, the world is living and acting, and living under such conditions that, if present customs are to be changed, others and better ones must be found and provided in substitution for them.

There is a population to deal with, a people largely and often exhaustively occupied during the day, and so occupied, that a large portion of it requires some relaxation in the evening, after the hours of toil shall have passed away. In the country districts the difficulty is less; but in the crowded districts of our large towns, where often many houses, without any surroundings, exist, and these, when present, often not the most wholesome or commodious, some means of passing the evening in reasonable recreation are absolutely necessary. The richer classes even, in large towns and cities, have felt the need of their *clubs and meeting places*, and gradually, also, working-men have followed this example, and have, in many places, set up their clubs of various kinds. If anyone would like to know the demand that exists for evening places of resort, I would ask him to observe the throngs of people who pour out of the public-houses on their closing at the hour of eleven at night. It is not to be supposed that all the frequenters of these houses of entertainment are drunkards, are even lovers of strong drink, although, from the constitution of these houses, they must necessarily drink to pay for the accommodation they receive; but they use them as clubs, as the only places open to them in which they can spend their evenings, and in which they find the light, the warmth, the company, the newspapers, the interchange of speech, which they crave, and which are there alone obtainable. This view of the uses to which the public-house parlour is applied, is confirmed by observation of what happens when a well-appointed circus or other similar place of outdoor amusement is located in such a town as Norwich. For although no drink, good or bad, is sold in the building, yet it may be seen for weeks together to be nightly thronged by a company of one, or, perhaps, two thousand people.

Acting upon this idea, and on this principle, there have now been established in many places public-houses without those elements which render them undesirable. The Café Company's houses, like to that recently opened in Norwich (and to which, I am sure, we all wish good speed), in which provision is made for amusement, for food, and for non-intoxicating drinks, are of this class, and so are the establishments of the London Coffee Public-house Association, and the Coffee Tavern Company, and others. But a recent writer (Mr. Moggridge, *Macmillan*, October, 1878) goes much further, and suggests the trial of the plan of retaining the present public houses, while keeping their attractive features, throwing the sale of drink so far into the background that it shall be the least prominent and important part of the establishment.

At present, of course, the public-houses exist only or chiefly in the sale of fermented liquors, and not for the benefit of the frequenter, whose primary object is often, at least at first, the enjoyment of the public parlour and its society. The writer above mentioned proposes, at least for a time, to convert them into veritable clubs, where fermented drinks can certainly be obtained, but where they shall by no means be the great and prominent part of the refreshment provided. He thinks that then it might be possible gradually to wean a large portion of their frequenters from their drinking habits,

and gradually also to introduce a better and more harmless system than now prevails. Whether or not such a scheme as this is practicable, or even desirable, it appears certain that in any attempt to close the present houses of public resort, other and more suitable ones must be provided.

Before quitting this part of the subject, I would desire to call attention to the laudable attempts already made in two adjoining parishes to furnish a sort of evening club room for the use of the poorer parishioners. In one of these parishes, I believe, the mission room is open for use every evening, and in the other a commencement has been made by opening the schoolroom on Saturday evenings. For these, newspapers, or reasonable games, are essential, and it is probable (as man is both a hungry and thirsty animal) that if they are to be permanently successful both food and harmless drinks must be obtainable; but whether tea and coffee will be sufficient, or whether some of the various unfermented drinks are required, which are described in a little book called, "A Book of One Hundred Beverages," I must not now stay to consider.

In England and countries of similar climate, the recreation difficulty is much greater than in more favoured countries, where the climate, in a larger portion of the year, admits of the evening hours being passed in the open air. Here, for months together, the evenings' relaxation must needs be within doors, and in many towns there is literally no place of indoor resort but the public-house, and, perhaps, the theatre.

A great aid to temperance will doubtless be given when, under the operation of the Artisans' Dwelling Act, or other similar legislation, the character of the worst localities of our towns improves. It is notorious that the narrower the streets, the more crowded the courts, and the worse the houses, the more do gin-palaces flourish, and the more does the population give itself up to the artificial stimulus of fermented liquors. And the reason is not far to seek, for if there be an absence of all comfort at home; if the house be small, and crowded, and dirty; if the water be bad, and perhaps unsuited for drinking; if there be no bit of garden in which to lounge, and to grow a few things in which interest can be taken; if there be nothing in home to render this agreeable – then, as a matter of course, recourse is had to that neighbouring house where nearly all these conditions are reversed, and dirt, and squalor, and crowding are exchanged for light, and brightness, and space.

I have said that an English climate is less adapted than many others to *out-of-doors' recreations* and amusements. Yet there is, even in England a very considerable portion of the year in which the existence of public parks and recreation grounds would contribute very largely to the promotion of temperance by providing pleasant spots in which to pass the hours unabsorbed by labour. But, I am sorry to say that our old city of Norwich has sadly degenerated from the time of Pepys, and enjoys an unenviable pre-eminence in the entire absence of these most desirable public spaces within its boundaries. With the exception of Chapel Field, we have not a single open public space. There is not a spot where the lads can play at cricket or football, or where their seniors can lounge away an evening hour; while as to a public park, the chance of this appears to grow dimmer and dimmer as the population of the city spreads and increases. I have ventured on more than one occasion to call attention to the need of such places for Norwich, and I have pointed to Mousehold Heath as a place which should, at all costs, be preserved for the city. But time passes. Several available spots for public recreation grounds have, one by one, been absorbed for building purposes, and Mousehold Heath – a space which appears to have been specially provided for the health and salubrity of future Norwich, and whose beauties and capabilities must surely be unappreciated by our citizens – is being gradually devoted to gravel pits, to brick kilns, and – to destruction. And let it not be supposed that the temperance of a population has no relation to its health and its general welfare. Beyond the attractions of a fresh and open spot, as a counter attraction to the public-house, the growth of a strong and healthy population tends powerfully in the direction of temperate habits, for the feeble and weakly will naturally seek indoor resorts, whilst the strong and the muscular will equally surely seek the open air. I wish I could think that Norwich was not suffering from this cause. But whoever observed the generally puny appearance, the poor *physique*, and the frequently strumous aspect of many of the

children and youth received into our schoolrooms during the late flood, and many of whom came from the most crowded parts of the city, must have been struck with the evidence they afforded of the want that existed for them of light, of air, and of healthy exercise.

Lest I should be thought to be dwelling too long on a subject of little importance, or little bearing upon this night's proceedings, let me read over to you a list of those places in England (and I am not sure that it is a complete list) which, during the past two or three years, have either had presented to them or have felt it their duty to provide public parks and recreation grounds for the use of the residents: – Reading, Birmingham, Dublin, Wigan, Leicester, Limerick, Lancaster, Heywood, Derby, Wolverhampton, Leeds, Longton, Torquay, Sheffield, Swansea, Newcastle, Exeter, and Falmouth.

The only other aid to temperance, to which I will now allude, is that of *public galleries of art and natural history*, and so forth. These are but small aids, but still they are appreciable ones, and I would gladly see such in Norwich. I do not know how far the disused gaol would be convertible to such public purposes, but it has struck me that the site is an admirable one, and the space ample for the collection in one spot, of an art gallery, museum, free library, popular lecture rooms, and for any other purposes which might properly come under the heading of popular instruction. The former city gaol has long been used as a public library. It would be a happy change if the late one could now be devoted, not to the punishment but the prevention of crime; not to the expiation of the results of indulgence in drink, but to the better training of men's minds, so as to teach them, by instinct and by culture, to avoid the destructive paths of vice and of excess.

I think, sir, I have said enough to show how large is this temperance question, in which we are all, in which, indeed, the whole community, is so greatly interested. In proof of its recognised importance, we may point to the fact that doctors, physiologists, ministers of religion, peers of the realm, and even a Prime Minister, have raised their voices in opposition to the progress of the crying evil of drunkenness. Many earnest men have striven, by the influence of their continued advice, and by the example of their personal abstention from intoxicating liquors, to help on the good work; and many others have done so in various indirect ways, and especially by efforts to ameliorate the condition of the people, and provide for them alternative means of harmless and rational occupation or amusement. These efforts are so persistent and now so general; they are founded upon such complete knowledge, and such recognised necessity, that they cannot fail rapidly to produce good fruit, and I believe they have already produced some good fruit in Norwich. But as social knowledge ripens, as acquaintance with the means of securing the general well-being increases, so we may hope that the difficulties attending the reformation of evil habits will lessen; and although we may not hope to see established a condition of houses, of streets, of towns, of food and drink, of labour, and of all those conditions which would render human life and surroundings ideally perfect, yet continuous efforts must be made to realise for the community such moral and physical surroundings as shall conduce to their welfare in the highest possible degree. And to this end, let us be sure that nothing will contribute so much as that soberness and temperance which it is the object of this Church of England Society to encourage and inculcate.

III.
ON TORTOISES. [2]

I have almost to apologize for bringing before so learned and critical a Society as this, the few notes and observations I have made upon the "manners and customs" of my pair of common land Tortoises, partly because I feel that much of what I have observed must also have been observed by other members of this Society; and still more because (as is well known) that incomparable master both of observation and expression – White of Selborne – has already noted, and placed upon record, the most interesting of the habits of these creatures.

Mine is thus necessarily a "twice-told tale." I can only hope that the never flagging interest which naturalists take in the observation or record of the habits of animals, will suffice to make them bear with me for the short time I shall detain them.

I have in my garden two of the common land Tortoises (*Testudo Græca*), and these have been in my possession three and four years respectively.

I purchased them from the barrow of a hawker in Norwich streets, in two following years – one being a little larger than the other, and they are in consequence known by the names of the *old gentleman* and the *young gentleman*.

Although selected as the best from a number of others, I am sorry to say that they both appeared to be ill or greatly injured, and it was a considerable time before they recovered sufficiently either to begin to take food, or to move about with their proper freedom, or with the well-known liveliness of Tortoises!

Another Tortoise, which I purchased, did actually die a short time afterwards, having lived in a state of semi-stupor for the intervening period; and I fear that the capability of these creatures for suffering is not much recognised in the usual methods of their conveyance and treatment.

The two Tortoises which survived have, as I said, now lived on my premises and thriven for three and four years. They have become almost pets. They most evidently recognise the place as their home. They know the various localities of the garden perfectly. They know the sunny spots to which to go at suitable times to bask. They know where to find sun, and where to find this and shade combined, when they so desire it; and they return, afternoon after afternoon, to the same cosy, and dry, and sheltered spots, under the dry ivy of the wall, or elsewhere, which they have often previously selected as their night's abode.

It is very plain that they have some recognition of individuals. For instance, if Lady Eade and myself are both preparing to feed them, they will constantly leave me and walk off to her – doubtless because she is more in the habit of bringing them their favourite kinds of food than I am.

They appear to be quick of *sight*, but show very little, if any, sign of having any impressions conveyed to them by the sense of *hearing*. They evidently possess a full sense of *taste*, for they discriminate instantly between food they like, and that which is less palatable to them.

The daily *habits* of these creatures are certainly very staid and methodical, and vary but little, except as the season of the year, and the warmth of the day, vary.

They are often, in the height of summer, quite early risers, and on sunny mornings will often be up, and perambulating the garden, and nibbling the little trefoil leaves found amongst the grass, by seven or six o'clock, or even earlier. But, I must say, that these early habits are quite limited to the very finest weather; and it has seemed that in the matter of early activity, these animals always err, if at all, on the side of care and caution. They never leave their beds, or the neighbourhood of cover, if

[2] Read September 28th, 1886, and reprinted from the "Transactions of the Norfolk and Norwich Naturalists' Society," Vol. iv.

there is the slightest appearance of cloudiness or rain, at least until the day is well up; and for a large portion of their year the time for coming forth is not until eight, nine, or ten o'clock.

In electrical weather they are never lively, even though the day be intermittingly hot and bright; and at such times they are often almost lethargic, and show great indifference as to feeding.

They appear to have an extreme and instinctive objection to rain. Cloudy weather makes them dull. A passing cloud will make them discontinue eating. And the passage of a person or object suddenly between them and the sun will cause them as suddenly to draw in their heads. The dislike of clouds and their accompaniments is therefore a very marked instinct with them.

If not fed, they will go and help themselves, not to grass, but to some white Clover growing with the grass in the garden; or in default of this, to some of the garden plants – by preference the fleshy-leaved ones, such as the Echiveria or Sedum – after which they will retire to some warm place, and bask in the sun. They have a special liking for the warm vine-border in front of my greenhouse; and if the day be not too hot, they will tilt themselves up edgeways against the south wall of the greenhouse, or upon the edge of some tuft of flowers; or if the sun is too warm, they will then cover their heads up with leaves or earth on the bed, leaving their backs uncovered and exposed to the heat. (In this respect they seem to remind us of the habits of the tiger in his jungle.)

But they appear greatly to prefer being fed, and having their food found for them; indeed further, one, at least, much prefers to have his food held up to him, and almost put into his mouth when he opens it.

They take their food with a snapping movement; masticate it little if at all; and when feeding themselves, cut or tear it with the sharp-hooked anterior portion of the upper jaw.

In the hottest weather their appetites are very fine (thus they will eat several large Lettuce leaves at one time), and they bear a close relation to the warmth and clearness of the day, and the period of the year.

Their favourite foods are – besides Trefoil, already mentioned, and garden flowers – Lettuces, Dandelions, French Beans, etc. They are much attracted by yellow blossoms, and greedily eat those of the Dandelion and Buttercup. One of my creatures is very fond of sliced Apple, though the other will not eat it.

But the vegetable of which they are most fond is the Green Pea. Both of them will leave all other food for this, and they will consume at a meal a very considerable number of these Peas. Indeed, so fond are they of them, that they will follow a person accustomed to feed them with them about the garden, and will even try to clamber up his legs to get at them.

After sleeping and basking, they will again eat, and then again sleep once or twice more during the day; but in cooler or doubtful weather, they usually eat only once a day, and sometimes not at all.

Although those who hawk Tortoises about the streets will often tell purchasers to put them into their kitchens that they may eat Beetles and Cockroaches, I believe it to be well understood that they are intrinsically vegetable feeders; a position well put by Frank Buckland, who says that Tortoises put into a kitchen to eat Beetles will in due time die of starvation, and then most probably the Beetles will eat them. Certainly ours never eat anything but vegetable food. But a Tortoise in a neighbouring garden does every morning consume a very substantial quantity of bread and milk, or rather bread well-soaked in milk, and he appears to thrive well upon it. Our Tortoises never drink water, and are decidedly not tempted to drink by milk being offered to them.

Whatever the season, the Tortoises retire very early to bed. The warmth and sunniness of the day appear to regulate the exact time, but they rarely remain up after three or four o'clock, and in the cooler seasons, or on dull days, they retire much earlier.

They will go day after day to the same warm and leafy nook; and they have a habit on rising in the morning of simply turning out of bed, and lying for a time just outside of their bed-place,

with their heads stupidly stretched out, or staring vacantly up into the air, before entering upon the serious business of the day.[3]

I should say their *Memory* is very strong. I have said they remember persons. They remember places they know, and if carried away will march straight off and back again to the place they wish to go to; and what is more remarkable, when brought out in the spring after seven or eight months' hybernation, they do exactly as they did the day before they went to sleep; and will march off as direct to the old spots as if they had only had one day's interregnum.

As a further instance of memory or intelligent knowledge, we are constantly in the habit, in the cooler weather, of putting them to bed under a mat in the greenhouse; and we very constantly find them, in the morning, waiting by the greenhouse door to be let out, clearly remembering that this is the place by which they will have to pass into the open air.

They do not appear to care much for each other's society – (I believe they are both males) – but they do not fight. Neither are they respecters of each other's persons, for they walk over each other's backs in the most indifferent way, if either happens to be in the direct road of the other's progression.

One of the creatures is certainly fond of climbing. We have several times found him mounted (when shut up in the greenhouse) upon the other's back; or upon an inverted flower-pot; and once we found him in a most pitiable condition through the exercise of these scandent aspirations. He had evidently been endeavouring to climb up some flower sticks placed slantingly against the wall, and in doing this he had turned over upon his axis; and when we found him he was reclining upon his back against these sticks, and standing upon one hind foot, whilst with the other, and with his fore feet, he was making frantic efforts to reinstate himself in a more comfortable position. As so placed he reminded us irresistibly and ludicrously of a huge toad held up by a fore leg.

Our Tortoises have certainly got tempers. They hiss when they are meddled with. They resist and try to scratch, or otherwise hurt, when lifted up from their place of repose; and they exhibit distinct petulance, and will jerk themselves forward out of your hand when you are again placing them upon the ground.

They are also very particular when going to their evening places of repose, and most distinctly refuse to go to rest in the place in which you try to place them, however comfortable this may appear to be, even if they have previously selected this spot for themselves day after day.

Mr. Darwin speaks of a large kind of Tortoise which is reputed to be able to walk at the rate of sixty yards in ten minutes; *i. e.*, three hundred and sixty yards in the hour, or four miles a day. I have twice timed the rate of progress of one of my Tortoises. Once it walked ten feet in the minute, and another time twenty feet in the minute. This latter is at the rate of twelve hundred feet, or four hundred yards, in the hour; or of a mile in between four and five hours. This truly is not quite the ordinary rate of the hare's progress, but I think they can cross a certain small distance of ground much more rapidly than we should at first suspect.

Once more. These creatures distinctly grow in size from year to year. Our two measure respectively seven and seven and a half inches in length. And they must have elongated fully an inch in the three and four years of our possession.

I weighed them this year, on May 29th, soon after their waking up for the summer, and again on September 8th. They weighed in May, 2 lbs. 7½ ozs. and 2 lbs. 3½ ozs.; a fortnight ago they weighed 2 lbs. 10 ozs. and 2 lbs. 5 ozs.; having thus gained in weight through their summer feeding 2½ ozs. and 1½ ozs. respectively.[4]

[3] It is noticeable how they both do the same thing, in a precisely similar way, at the same time, and this applies even to the attitudes they assume.

[4] April, 1887. They have just been again weighed, after their winter's hybernation; and their weight now is, respectively, 2 lbs. 7½ ozs. and 2 lbs. 2½ ozs. Thus each of them has lost 2½ ozs. in the seven months of quietude.

When the due period arrives in which they naturally bury themselves, and so surround themselves with earthen bulwarks, and then retire for the winter into their carapace castles, we put them down into a cupboard in the cellar.

Mr. White remarks that his Tortoise did not bury itself into the ground before November 1st, but ours are cold and torpid, and quite ready to hybernate by the first week in October. Probably the different latitude and longitude of Selborne and Norwich may account for this difference of time.

In this cellar cupboard, the Tortoises remain until the end of April, when, though still dull and stupid, the weather is getting sufficiently warm for them to enjoy the sun for a portion of the day. But the frosts and cold of this period of the year are still dangerous. And a relative of mine lost both of his old friends (who for years had taken care of themselves in the winter in his garden) during the cold weather of this spring, after they had duly survived the far greater cold of the winter in the ground places in which they had buried themselves.

From October to April – fully seven months – they rest from their labours of eating, of breathing, shall I say, of thinking? (or nearly so, for they occasionally stir a little, and are found to have moved a little from under their straw). But they neither eat nor drink, nor see light, nor (I believe) open their eyes. And when touched during this time they feel of a stony coldness, and certainly appear to have none of their faculties in operation.

But with the warmer weather, they again gradually resume the precise habits of the preceding year. Gradually, their bright little eyes resume their intelligence; their memory re-awakens; and they return to the ways, and the habits, and the places of the preceding season, as if their sleep of seven months were but a single night, and last summer verily but as yesterday.

They are in many respects both curious and remarkable animals. We find them to have enough of intelligence, enough of quaintness, and apparently enough of affection, to give them considerable interest in the eyes of their owners, and to raise them out of the level of despised reptiles. Whilst their remarkable construction, and mysterious power of hybernation, render them specially worthy of study and contemplation.

These specialities and peculiarities must be my much-needed excuse for having troubled you so long with these few details of their personally observed habits and ways.

IV.
A FURTHER NOTE UPON TORTOISES. [5]

In the year 1886 I read before this Society a paper in which I recorded some of the observed habits and peculiarities of a pair of Tortoises which I had then kept in my garden for three and four years respectively. This paper was afterwards published in our Society's "Transactions" (Vol. iv. p. 316), and will probably be remembered by some of our members.

I would like this evening to say a few further words upon these creatures, which are still living and in my possession – more particularly with reference to their *rate of growth and increase*.

The two Tortoises have now been in my possession ten and nine years respectively. Six years ago I reported to this Society that *they measured*, the one 7½ and the other 7 inches in *length*. Now at the end of six further years their antero-posterior measurements are 9½ and 9 inches respectively – the measurements being made from before backwards over the convex surface of the carapace. They have, therefore, each of them, thus measured, increased exactly two inches in length in the last six years, or at the rate of exactly one-third of an inch per year.

(The under flat surface of the shell now measures 6½ and 6¼ inches from before backwards. These Tortoises are said not usually to exceed 10 inches in entire length.)

Then as to their *weight*. I have now kept an exact record of their respective weights in the spring and autumn of each of the past seven years, *i. e.* their weight on commencing to hybernate in October or November, and again their weight on returning afresh to light and more active existence in April or May of the following spring. And it is interesting to notice how almost continuously they have increased both in size and weight; and also how corresponding are the alterations, or otherwise, in the consecutive years, both of spring and autumn, of the two animals.

In my former paper, I mentioned that during the summer months of 1886, when I first weighed them, *i. e.* from May to September, my Tortoises had gained in weight, the one 2½ ounces, and the other 1½ ounces; whilst each of them became lighter in the following winter by 2½ ounces. Since that time the spring and autumn weighings have been regularly continued, and the result is shown in the following table.

WEIGHT								
	Of Larger Tortoise.				Of Smaller Tortoise.			
	April.		October.		April.		October.	
Year.	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.
1886	2	7½	2	10	2	3½	2	5
1887	2	7½	2	10	2	2½	2	5
1888	2	10	2	13½	2	5	2	8¼
1889	2	13	2	14	2	8	2	8½
1890	2	12½	3	0½	2	7½	2	12
1891	2	15½	3	2	2	10	2	12½
1892	3	1	3	3½	2	12	2	14½

In the seven years, therefore, 1886 to 1892, the larger Tortoise has increased in weight from 2 lbs. 10 ozs. to 3 lbs. 3½ ozs.; and the smaller Tortoise from 2 lbs. 5 ozs. to 2 lbs. 14½ ozs., giving a total increase of weight in this period of exactly 9 ounces for each animal, or an average annual increase of about 1 ounce and 5½ drachms (avoirdupois).

[5] Read November 29th, 1892, and reprinted from the "Transactions of the Norfolk and Norwich Naturalists' Society," Vol. v.

The general result also of the above weighings is to show that, in average seasons in England, these creatures gain from 2 to 2½ ounces in each summer, and lose again a varying but considerable portion of this increase during the ensuing six or seven months of hybernation; but, on the whole, showing an average gain of a little more than one ounce in the year – the average gain of weight per month in summer working out at about 6 or 7 drachms, with an average loss in the winter months of about 4 or 5 drachms per month. This last fact scarcely agrees with Cuvier's statement that "during winter.. their loss of substance amounts almost to nothing."

It will be noted that the foregoing table shows certain variations in the increases and decreases of weight in the several years; also that in two of the years there was but little change between the autumn and spring weights – this period of stagnation occurring in both animals simultaneously. Probably several causes for this were at work, but I have little doubt that the variability of our English seasons is by far the largest factor in the case; and that the variations in the gainings and losings of the different summers and winters depend very largely upon the special character of these seasons. Thus, when the summer months are hot the Tortoises eat much more abundantly and constantly, and consequently put on (or rather put inside their skeletons) much more flesh than in colder seasons. On the contrary, a warm autumn, with the temperature not sufficiently cold to make them go early and thoroughly to sleep, must conduce to greater loss, or rather waste, of their flesh, for it is well known that these animals cease to eat many weeks before they finally retire to rest for the winter; and necessarily during this period, especially on sunny days in which (even at this season) they are often moderately lively and active, they are doubtless breathing and consuming some of the material which has been stored up for winter consumption. Whilst again, in a very mild winter or spring they will, as is well known, frequently wake up from their dormancy, and of course, on each such occasion will make further inroads upon their reservoir of nutrient material.

It is therefore pretty certain that hot summers and cold winters are most conducive to their rapid increase in size and weight; whilst of course the contrary conditions would have an exactly opposite result.

Конец ознакомительного фрагмента.