PART III

SPECIAL SYNTHESSES
CHAPTER IX
ystems as individualised

Power in this is mainly shown:
Others' wit to make our own.

201.—The immediate relation of the individual to his environment.

In sec. 97 I referred to the fact that man's originality is restricted within narrow boundaries. In this chapter I intend to treat the subject exhaustively, and show what amount of truth or error underlies the doctrine of the spontaneity of the soul. I purpose defining, as far as possible, the psychological relation in which the individual stands towards his fellows and towards his past self, for both from a theoretical and a practical standpoint it is desirable that the issue should be resolved.

To give our discussion a concrete basis, I will examine in detail Shakespeare's Sonnets, after which I shall try to prove that what I have stated of Shakespeare in particular holds good of humanity in general. Here is the 116th sonnet as an illustration of the class to which it belongs:

"Let me not to the marriage of true minds
Admit impediments. Love is not love
Which alters when it alteration finds,
Or bends with the remover to remove:
O, no! it is an ever-fixed mark
That looks on tempests and is never shaken:
It is the star to every wandering bark,
Whose worth's unknown, although his height be taken.
Love's not Time's fool, though rosy lips and cheeks
Within his bending sickle's compass come;
Love alters not with his brief hours and weeks,
But bears it out even to the edge of doom.
If this be error and upon me proved,
I never writ, nor no man ever loved."

202.—Shakespeare and the Sonnet.

The notion of sonnet writing did not originate with Shakespeare. When we study his age, and especially the last decade of the sixteenth
century, we find that sonneteering was the rage. Watson, Spenser, Daniel, Drayton, Griffin, Smith, Lodge, Fletcher, Constable, Barnes, Chapman, and others, all published collections of sonnets between about 1590 and 1600. Sir Thomas Wyatt and the Earl of Surrey were among the first to experiment in England with this poetic form, and Sidney and Spenser, with many more, made it popular.


Shakespeare's sonnets indicated, therefore, no spontaneous outburst on his part. In choosing to address his friend, and in selecting the sonnet as his medium, he did what a host of others were doing. As the corn bends with the wind which sweeps across it, so the wizard breath of fashion is irresistible, most of us yielding to its impulse. Seeing his fellow poets pour out their souls in cycles of sonnets, entering into these productions till he became saturated with their spirit, and being himself in the throes of a passion, what other course could he take but join the choristers? The vis a tergo of fashion is despotical. We meet its expression so continuously and persistently morning, noon and night that, struggle as we may, we are compelled to surrender. There are none who escape this power wholly, and there are few who are not its bond-servants. Shakespeare, then, obeyed the spirit of his period when he ventured on writing sonnets. Indeed, it was a mark of his character, perhaps even more than of his time, to imitate his contemporaries.

Crow (Elizabethan Sonnet Cycles, 1896) says in the introduction to Daniel: "Shakespeare's sonnets are full of echoes from the voices of Sidney, Constable, Davies, Lodge, Watson, Drayton, and Barnes, as well as from that mellifluous one of Daniel" (pp. 3-4). So Lee, A Life of Shakespeare, 1899; pp. 109-10: "The thoughts and words of the sonnets of Daniel, Drayton, Watson, Barnabe Barnes, Constable, and Sidney we
assimilated by Shakespeare in his poems as consciously and with as little compunction as the plays and novels of his contemporaries in his dramatic work.” See his section on The Vogue of the Elizabethan Sonnet, pp. 427-41.

203.—Shakespeare and the Sonnet Form.

We are not concerned with the evolution of the Italian or French sonnet and its transference to, and development in, English soil.* All that we are bound to note is that the literature of Italy and France was extensively studied, translated and taken as a model, by the literary men of the sixteenth century in England. To that tendency we owe our sonnet. Many were the changes in form that it subsequently passed through. On the whole, however, one form was by far the most general among the Elizabethans, being employed by the Earl of Surrey, by Daniel, Drayton, Smith, Lodge, Fletcher, and others. When Shakespeare wrote his quatorzains that was the ruling form, and so he straightway adopted it. Here is an early specimen by the Earl of Surrey (d. 1547):

“The golden gift that Nature did thee give,
   To fasten friends and feed them at thy will
With form and favour, taught me to believe
   How thou art made to show her greatest skill:
Whose hidden virtues are not so unknown
But lively dames might gather at the first;
Where beauty so her perfect seed hath sown,
Of all other graces follow needs there must.
Now certes, Lady, since all this is true,
That from above thy gifts are thus elect,
Do not debase them then with fancies new,
Nor change of moods let not the mind infect:
But mercy him, thy friend, that doth thee serve,
Who seeks always thine honour to preserve.”†

Comparing this typical sixteenth century sonnet with the one we have quoted from Shakespeare, we see how unreservedly he adopted the current

*See Lee’s learned Bibliographical Note on the Sonnet in France, 1550-1600, on pp. 442-5 of the quoted work.
† “The whole period from Wyatt to Shakespeare shows a slow and steady mastery of the native over the foreign tendency. The change was not a sudden leap on the part of Daniel and Shakespeare, but a gradual growth occupying a half century and culminating in the English form” (Crow, Elizabethan Sonnet Cycles, Introduction to Daniel, p. 5).

Here is an analysis of the sonnet form in the twenty-two authors quoted. Anonymous: the placing of rhymes varies; but many sonnets have the same form as Shakespeare’s. Barnes: many of 15 lines, and rhymes irregular. Barnfield: rhyme a b a b c d d e f g c f g e c f. Chapman: rhymes as Shakespeare’s. Constable: a b b c a b a b c d e d e. Daniel: rhymes vary; but generally as Shakespeare’s. Davies, rhymes as Shakespeare’s. Donne: rhymes as Shakespeare’s. Drayton: rhymes chiefly Shakespeare’s. Fletcher: rhymes as Shakespeare’s. Greville, Lord Brooke, rhymes undecided. Griffin: rhymes as Shakespeare’s. Harvey: rhymes vary. [Inch: ] rhymes as Shakespeare’s. Lodge: rhymes as Shakespeare’s. Percy: rhymes as Shakespeare’s. Sidney: rhymes vary. Smith: rhymes as Shakespeare’s. Spenser: a b a b b c b c d e d e. [Often: a b a b c c doubled, and a b a b c d e d e e, these two forms alternating. Watson: (early sonnets) three sets of a b a b c c, making 18 lines; and (later sonnets) as Shakespeare’s.
form. In both instances the number of lines is fourteen. In both instances the rhymes are alternate in the first twelve lines. In both instances the poem ends with a couplet which tends to sum up the argument of the preceding twelve lines. In both instances the lines are all de-casyllabic. There is an apparent difference in that Shakespeare occasionally makes his lines end in a short syllable, an eleventh; but, as a matter of fact, all the sonnet writers allow themselves this deviation from the normal. There are other striking structural resemblances. There is with the sonneteers a tendency for their lines to run very smoothly. The sentences are almost uniformly short and forcible, ending usually with the rhyme, and it is rare for full stops to occur in the middle of the line. This contrasts with the modern sonnet in which the sentences are long and involved, and where little regard is paid to music as expressed by a feeling for the metre and the rhythm, so that they read like cumbersome blank verse. The student may with advantage compare the sonnet of the nineteenth with that of the sixteenth century. Here is Wordsworth’s sonnet, “Scorn not:”

“Scorn not the sonnet; critic, you have frowned,
Mindless of its just honours;—with this key
Shakespeare unlocked his heart; the melody
Of this small lute gave ease to Petrarch’s wound;
A thousand times this pipe did Tasso sound;
Camoëns soothed with it an exile’s grief;
The sonnet glittered a gay myrtle leaf
Amid the cypress with which, Dante crowned
His visionary brow; a glow-worm lamp,
It cheered mild Spenser, called from fae.y-land
To struggle through dark ways; and when a damp
Fell round the path of Milton, in his hand
The thing became a trumpet, whence he blew
Soul-animating strains—alas, too few!”

The difference between the technique and the spirit of this sonnet and of the one quoted from Shakespeare indicates not two individuals, but two epochs. The reader who is acquainted with no other Elizabethan poet but Shakespeare must be careful not to consider as characteristic of him alone what is really a badge of the period. The sixteenth century sonneteers whose names we have mentioned wrote in much the same strain. What differences there were, consisted in stronger leanings in certain directions; that is to say, various writers accentuated various tendencies.

204.—Peculiar Sonnets.

We have insisted that Shakespeare’s sonnet, its music, its perfume, its splendour and its delicacy, was no creation of his own. Its atmosphere betokens an epoch, not a man.

Among the sonnets we are analysing there are several which are curiously affected and over-subtle. It might seem that these were native to our poet.
As a matter of fact, he but followed the fashion, often apparently going so far as to adapt another's work. Compare his 46th sonnet:

"Mine eye and heart are at a mortal war
How to divide the conquest of thy sight;
Mine eye my heart thy picture's sight would bar,
My heart mine eye the freedom of that right.
My heart doth plead that thou in him dost lie,
A closet never pierced with crystal eyes,
But the defendant doth that plea deny
And says in him thy fair appearance lies.
To 'cite this title is impannelled
A quest of thoughts, all tenants to the heart,
And by their verdict is determined
The clear eye's moiety and the dear heart's part:
As thus: mine eye's due is thy outward part,
And my heart's right thy inward love of heart."

with Constable's (Diana, Sixth Decade, sonnet 7):

"My heart mine eye accuseth of his death,
Saying his wanton sight bred his unrest;
Mine eye affirms my heart's unconstant faith
Hath been his bane, and all his joys repressed.
My heart avows mine eye let in the fire,
Which burns him with an everlasting light.
Mine eye replies my greedy heart's desire
Let in those floods, which drown him day and night.
Thus wars my heart which reason doth maintain,
And calls my eye to combat if he dare,
The whilst my soul impatient of disdain,
Wrings from his bondage unto death more near;
Save that my love still holdeth him in hand;
A kingdom thus divided cannot stand!"

Compare with the above two poems, Watson's sonnet 20, 1593:

"My heart accused mine eyes and was offended,
Vowing the cause was in mine eyes aspiring:
Mine eyes affirmed my heart might well amend it,
If he at first had banished love's desiring.
Heart said that love did e'en at the eyes,
And from the eyes descended to the heart:
Eyes said that in the heart did sparks arise,
Which kindled flame that wrought the inward smart,
Heart said eyes' tears might have quenched that flame,
Eyes said heart's sighs at first might love exile:
So heart the eyes and eyes the heart did b'one,
While both did pine for both the pain did feel.
Heart sighed and bled, eyes wept and gazed too much,
Yet must I gaze because I see none such."

The resemblance between the three sonnets is too great to be accounted for by accident. With this, however, we have nothing to do, the poin-
being that wherever there is a change in the style of sonnets, as in sonnets 39, 40, 42, 45, 47, 66, 134-136, it is not difficult to find a model for the new style in the work of his predecessors. Deviations from the normal in the poems must not, therefore, be construed as original conceptions. Shakespeare’s weaknesses are those of his times. As silly sheep follow each other unreasoningly, so he, in imitation of others, often allowed himself to be caught in the meshes of an over-subtle style.

205.—Shakespeare’s Language.

A peculiarity, and not by any means an unimportant one, in Shakespeare’s style is his use of unconventional, vigorous and thoughtful adjectives. Some of the depth and virility of his manner lies in these, and they also separate him from modern poets. Thus he employs the word Time eleven times with an adjective before it, as follows: “golden time,” “never-resting time,” “wasteful time,” “devouring time,” “swift-footed time,” “old time,” “dear time,” “sluttish time,” “wasted time,” “inviting time,” “reckoning time.” Such adjectives give a ducal richness to the sentences in which they occur. They convert what would otherwise be personal and particular into what is impersonal and universal. Here is a further selection from the sonnets: “Reckoning time whose millioned accidents,” “an all-eating shame and thriftless praise,” “hideous winter,” “winter’s ragged hand,” “hideous night,” “sable curls,” “sullied night,” “stretched metre of an antique song,” “swart-complexioned night,” “sullen earth,” “swift extremity,” “dull flesh,” “blunting the fine point of seldom pleasure,” “than unswept stone besmeared with sluttish time,” “all-oblivious enmity,” “world-without-end hour,” “keep open my heavy eyelids to the weary night,” “beaten and chopped with tanned antiquity,” “time’s injurious hand,” “age’s, steepy night,” “against confounding age’s cruel knife,” “time’s fell hand,” “outworn buried age,” “hungry ocean,” “the firm soil wins of the watery main,” “against the wreckful siege of battering days,” “captive good attending captain ill,” “the surly sullen bell,” “niggard truth,” “filching age,” “mouthed graves,” “time’s thievish progress,” “heavy ignorance,” “rude ignorance,” “my saucy bark,” “time-bettering days,” “lean penury,” “in polished form of well-refined pen,” “ungathered fruit,” “teeming autumn,” “proud-pied April,” “white despair,” “resty Muse,” “steeled sense,” “adder’s sense,” “vexed oblivion,” “tongue-tied patience,” “testy sick men,” “tunning love.”

From no other series of sonnets or poems of the same length could probably such an abundant harvest be gathered. One has only to attempt to find adjectives of this character within one’s own self to see how our thought vainly strives to escape the beaten path of custom. We see in them an effort to emancipate oneself from listless or slavish thinking. However, our interest lies in other directions. We want to know whether the difference in this respect between us and Shakespeare, is as great as that which existed between him and his contemporaries. Our answer cannot be as decided here. The notion of throwing off the shackles of
poverty-stricken custom is not traceable to him. Spenser's *Fairy Queen* is replete with adjectives of this very class, and others of his contemporaries are not unaffected by the charm. Shakespeare is, therefore, not original in this respect. Still, no other sonneteer of his time made such extensive use of expressive adjectives. He adopted the style, but increased its scope. We read in Griffin of "all-withering age," "injurious fates," "all-reporting fame," "killing grief," "traitor absence," "never-speaking silence," "ever-flying flame," "all-concealing night," "men-devouring wrong," "soul tormenting grief;" and in Daniel we read of "cruel time," "time's consuming rage," "tyrant time," "swift speedy time," "unsparing time," "sacred time," "golden hairs shall change to silver wire," "mercy-wanting storm," "care-charmer sleep." On the whole, however, significant adjectives are employed casually, not systematically.

What has been said as to adjectives is true also of other important parts of speech. Their value in the sonnets is often unmistakable, while, at the same time, they tend to give weight and dignity to many of the sentences and thoughts. In these details of Shakespeare's style he cannot be called original, though undoubtedly he recognised their usefulness to a greater extent than most of his contemporaries. In that, and in that alone, lay his pre-eminence. His claim to inventiveness must be dismissed.

The 116th sonnet, already quoted, is a good illustration of Shakespeare at his best, and he is that frequently. We must re-member in this connection that there is no necessary relation between poetry and imagery. French verse up to the nineteenth century was, if I mistake not, almost devoid of it. Poetry may reach a tolerably high level, and yet be almost entirely wanting in this element. Taking versification as a whole, we find specimens of every variety of colouring from monotonous grey to rosy luxuriousness, each period of history having usually a tendency of its own. The sonnet of Wordsworth which we cited is fairly typical of modern poetry, allowing for Keats and Shelley. Even more true to their period are the sonnets whose psychological origin we are endeavouring to trace. They, too, offer, as regards imagery, a faithful picture of the Elizabethan times. Both in matter and manner they reveal their birth-place. If we had no other guide to the time of their composition, the secret of their imagery would place them. For at no other date was poetic painting of just this kind, and never did child betray its parentage so clearly as the colouring of the sonnets discloses the Elizabethan touch. Strictly speaking, it was not Shakespeare's soul that characterized in ink these lofty conceits; it was the inventive spirit of his time.

Elizabethan imagery is distinguished by wealth and character. Richness of colour, however, is in itself no virtue, for many a writer is florid, and yet lacks merit. He threads on strings a quantity of hackneyed and feeble illustrations; or invents what of itself is malapropos, uninteresting and poor; or he is bound within a small compass, so that we can almost divine what form his fancy will take. Breadth, depth, vigour, grandeur, mark the best Elizabethan word-painters, and these qualities we meet with in
Shakespeare. The moulder of stanzas who communes only with himself and is dead to the throbbing world; to whom nature, history, art, science, commerce, the home, are pale abstractions, cannot fascinate our imagination. The Elizabethan poetry reflects the Elizabethan life, its liberal interests and its thirst for action.

So much for Shakespearean imagery in general. Foremost in quantity in the sonnets stands the conception of time and its derivatives, age, death, night, sun and season. I have already referred to the fact that in the first 126 sonnets the word Time is used with an adjective before it eleven times. A close study reveals that Time is personified no less than forty-eight times in these poems, and is employed altogether seventy-three times. Whole sonnets are devoted to it, as 19, 64, 65 and 123, though this does not exhaust the central conception. The frequent references to death, age, the periods of the day, the seasons, are variations of the same theme. The poetic handling of this conception on so large a scale can only be defended on the ground of effectiveness, and, judging from modern poetry, one would think it impossible that a notion should not have died of anemia long before it was personified for the forty-eighth time. However, only those spiritually sapless will think so. To an Elizabethan, Time was a concept which grew in attractiveness before his eyes the longer he gazed on it. Use did not wear it out; it only unfolded its implications. It was a notion which Shakespeare had employed before, and which he never wearied of returning to afterwards. In the nature of things, time and its family are leading conceptions in every strong nature which is not habit-ridden. They are the matrix in which the tissue of our existence is embedded, and only the poverty of our thought limits the richness of their inner meaning.

This poetic simile of Time did not originate with Shakespeare, for it is an old and favourite personification. In Daniel's sonnets the allusions to the subject are not infrequent. We find there "cruelest time," "time's consuming rage," "tyrant time," "time bestows," "time doth spoil her," "time hath made a passport," "swift speedy time," "to spend the April of my years," "no April can revive." The likeness in thought is conspicuous; and if Daniel's reflections are less frequent, there is yet one unmistakable current underlying the works of both poets. So Sidney: "niggard time," "stealing time."


The subject which stands next in quantitative importance to time, is that of law. This is startling, and deserves a special explanation. Shakespeare's allusions, like those of his great contemporaries, are culled from so large a
field that occasional references to law should not surprise us; but the question assumes the dimensions of a problem when it is found that law all but holds the first place. The two selected sonnets are pointed illustrations of this. The first one starts in dry legal phraseology: “Let us not to the marriage of true minds admit impediments.” The other sonnet is more remarkable still. It reads like a brief full of legal technicalities; and yet Constable’s poem has not a trace of this element, though it is otherwise its double. There are references to law in a large number of the sonnets.

Here we strike on something which cannot apparently be traced to Shakespeare’s professional environment. Given occasional allusions in his contemporaries (Compare “that beauty which you hold in lease,” with Daniel “in beauty’s lease expired”; also in the same writer “cast th’ accounts,” “summon,” and possibly other similarities), and we discover the plank over which Shakespeare passed to the abundant use of legal imagery. Uncontrolled circumstance was probably the leading factor.

The circumstance is not so inexplicable as the text supposes. For instance, sonnets 20, 37, 38, in Anonymous, Zephyria, are legal in character; No. 20, in Barnes’ Parthenophil, has legal metaphors: “tenants,” “freewill,” “in tenour of love’s service,” “exaction,” “rent”; sonnet 5, in Griffin’s Fidesia, belongs to the category of law; Sidney’s Stella, sonnet 18, has: “audit,” “accounts,” “bankrupt”; and, lastly, Lee, in his Life of Shakespeare, quotes Sir J. Davies as ridiculing the frequent use of law in the sonneteers of his time.

Apart from Time and Law, the similes in the sonnets are taken from nature, music, painting, the stage, war, the Court, friendship, love, home, disease, avarice, the sea, navigation, the Muses, the dial and the mirror. Many of these subjects, as those implied in nature, the sea, painting, the mirror or glass, occur repeatedly; and all of them are favourite subjects of the Elizabethans.

So-called Shakespearean imagery is not uncommon with his contemporaries. Most of them remind us of him who expressed them generally best. Witness Daniel:

“’The broken tops of lofty trees declare
The fury of a mercy-wanting storm.”

Or

“The ocean never did attend more duly
Upon his sovereign’s course, the night’s pale queen,
Nor paid the import of his waves more truly,
Than mine unto her deity have been.”

Or (of England)

“Neptune’s best darling, held between his arms.”

Or, to quote Constable:

“Care, the consuming canker of the mind
The discord that disorders sweet hearts’ tune!
Th’ abortive bastard of a coward mind!
The lightfoot lackey that runs post by death,
Bearing the letters which contain our end!
The busy advocate that sells his breath,
Denouncing worst to him, is most my friend!”
There is in this last passage something peculiarly characteristic of all that can be said of Shakespeare. Here is his breadth, his depth, his simplicity, his music and his vigour! Extracts might be largely multiplied; but the above quotations must suffice.

Or, "Come, sleep! O sleep, the certain knot of peace,
The bating-place of wit, the balm of woe,
The poor man's wealth, the prisoner's release,
Th' indifferent judge between the high and low."

_Sidney, Sonnet 39._

Or, "Thou blind man's mark, thou fool's self-chosen snare,
Fond fancy's scum, and dregs of scattered thought:
Band of all evils: cradle of causeless care;
Thou web of will, whose end is never wrought:
Desire! desire! I have too dearly bought,
With prise of mangled mind, thy worthless ware."

_Sidney, Sonnet 109._

Or, "The marigold so likes the lovely sun,
That when he sets the other hides her face,
And when he 'gins his morning course to run,
She spreads abroad and shows her greatest grace."

_Watson, 1582, Sonnet 19._

Or, "When May is in his prime, and youthful spring
Doth clothe the tree with leaves, and ground with flowers,
And time of year reviveth everything;
And lovely nature smiles, and nothing lowers:
Then Philomela most doth strain her breast
With night-complaints, and sits in little rest."

_Watson, 1582, Sonnet 26._

A peculiarity of Shakespeare is that he not only writes like his fellows, but also makes free use of their productions. Often there is no more than a strong likeness, suggesting the source of the line or sonnet, but frequently there is no reasonable doubt as to their origin. I can only give a few quotations in illustration. In the sonnets we find:

"Distilled from limbeck's soul as hell within,"

In Spenser we read:

"... the dull drops ...
As from a limbeck did adown distil."

In Barnes:

"From my love's limbeck still, 'stillest tears."

In Lodge:

"The limbeck is mine eye that doth distil the same."

While Spenser speaks of "lofty trees, yclad with summer's pride;"

Shakespeare tells us that

"Three winters con
Have from the forests shook three summers' pride."

Thus Lily, praising the lark, says:

"How at heaven's gates she claps her wings,
The morn not waking till she sings."
And Shakespeare:

"Like to the lark at break of day arising
   From sullen earth, sings hymns at heaven's gate."

Many more such resemblances might be insisted on. Let us instead consider another class of parallels. Shakespeare repeatedly tells his friend, with variations:

"O, give thyself the thanks, if ought in me
   Worthy perusal stand against thy sight."

So Sidney:

". . . . in Stella's face I read
   What love and beauty be; then all my deed
   But copying is, what in her, nature writes."

"All my words thy beauty doth indite,
   And love doth hold my hand and makes me write."

So Daniel:

"If any pleasing relish here I use,
   Then judge the world her beauty gives the same."

Constable writes:

"I never will deny
    That former poets praise the beauty of their days;
    But all those beauties were but figures of thy praise,
    And all those poets did of thee but prophesy."

So Shakespeare:

"So all their praises are but prophecies
   Of this our time, all you prophuring."

Similar resemblances we have noted previously. An intimate study of the Elizabethans would prove that our poet-in-chief was largely indebted to others for special images, conveys turns of phrases and ideas. He dwelt lovingly on the good things which he found in his predecessors. For instance, what could be prettier than the 99th sonnet (which, by-the-bye, has fifteen lines):

"The froward violet thus did I chide:
   Sweet thief, whence didst thou steal thy sweet that smells
If not from my love's breath? The purple pride
Which on thy soft cheek for complexion dwells
In my love's veins thou hast too grossly dyed.
The lily I condemn'd for thy hand,
And buds of marjoram had stol'n thy hair:
The roses fearfully on thorns did stand
One blushing shame, another white despair;
A third, "'tis red nor white, had stol'n of both
   And his robbery had annexed thy breath;
But, for his theft, in pride of all his growth
A vengeful canker eat him up to death.
More flowers I noted, yet I none could see
   But sweet or colour it had stol'n from thee."
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Compare this with a sonnet of Constable's:

"My lady's presence makes the roses red,
Because to see her lips they blush with shame.
The lily's leaves for envy pale became,
And her white hands in them this envy bred.
The marigold * the leaves abroad doth spread,
Because the sun's and her power is the same.
The violet of purple colour came,
Dyed in the blood she made my heart to shed.
In brief, all flowers from her their virtue take;
From her sweet breath their sweet smells do proceed;
The living heat which her eyebeams doth make
Warmeth the ground and quickeneth the seed.
The rain wherewith she watereth the flowers,
Falls from mine eyes which she dissolves in showers."

206.—Shakespeare's Insight.

Shakespeare's insight is universally acknowledged. It is as a thinker, that we wish here to learn something of him from the sonnets. Necessity does not ordain that epistles addressed to a friend or mistress should contain general reflections. Accordingly, many of Shakespeare's sonnets are entirely devoid of such; while those of his contemporaries confirm our contention. The value and weight of his cycle of poems depend almost entirely on the impersonal element, and but for that Shakespeare would not be great. We have already touched upon this side of his character when speaking of the luminous adjectives he uses and of his references to Time and its derivatives. And in the same connection we have seen that for Shakespeare cannot be claimed the merit of originality on that score. We noted nevertheless that what was comparatively rare in his models is a familiar strain with him. This is emphatically true of what is impersonal in the sonnets. Lacking as he may be in inventiveness, he yet almost changed the nature of his sonnets, perhaps slightly marred them, by his wholesale introduction of reflections. Where his conmpeers are absorbed in the object of their affection, he constantly looks upon his love as connected with general characteristics. He declines to dwell, perhaps he finds it impossible to do so, in the personal sphere. Suddenly he breaks out with:

"O, love's best habit is in seeming trust,
And age in love loves not to have years told."†

Or, "Love is too young to know what conscience is:
Yet who knows not conscience is born of love?"

In this way Shakespeare ever bursts through the narrow bounds of the personal. The 116th sonnet, which is quoted at the beginning of this

* Compare the lines on the marigold I have quoted from Watson with the two lines and the two quotations with the image in Shakespeare's sonnet 25:

"Great princes' favorites their fair leaves spread
But as the marigold at the sun's eye."

† The 1599 edition of this poem has "O, love's best habit is a soothing tongue," a very inferior line.
chapter, may be taken as a choice specimen of his philosophising mood. To quote other examples would be superfluous.

Animal species are not originated by a sudden flat, but as the result of an exploitation of such slight variations as are favoured by the environment. No evolutionist, therefore, should be startled when he finds that Shakespeare did not come like a clap of thunder from the sky; but only showed certain modifications from his contemporaries. Great men do not constitute species; they merely raise a variety to that dignity by bringing it into prominence. Shakespeare's insistence on the universal rivets our attention on him, rather than on others who touch upon it incidentally. Strictly speaking, therefore, it is quantity and not quality which distinguishes him. Had there been but two or three of the sonnets written in a reflective vein, and only a dozen or two incidental impersonalities, the name of Shakespeare, as far as the sonnets are concerned, would have ranked with Daniel and other little known authors. It is the quantity of finer work which has rescued him from the clutches of neglect; or, to put the matter differently, had Daniel quintupled his general references and Shakespeare decreased his considerably, there is fair reason to believe that Daniel would have been our great sonneteer. In illustration of this, I will quote two of Daniel's sonnets to show the higher qualities in Shakespeare's compeers (Sonnet 30, 1594):

"And yet I cannot reprehend the flight,
Or blame th' attempt presuming so to soar,
The mounting venture for a high delight
Did make the honour of the fall the more.
For who gets wealth that puts not from the shore?
Danger has honour, great designs their fame,
Glory doth follow, courage goes before,
And though th' event oft answers not the same,
Suffice that high attempts have never shame.
The mean observer (whom base safety keeps)
Lives without honour, dies without a name,
And in eternal darkness ever sleeps.
And, therefore, Delia, 'tis to me no blot,
To have attempted, though obtained thee not."

And what seems Daniel's best (Sonnet 49, 1594):

"Care-charmer sleep, son of the sable night,
Brother to death, in silent darkness born;
Relieve my anguish and restore the light,
With dark forgetting of my cares return.
And let the day be time enough to mourn
The shipwreck of my ill-adventured youth:
Let waking eyes suffice to wait their scorn,
Without the torment of the night's untruth.
Cease, dreams, the imagery of our day-desires,
To model forth the passions of the morrow,
Never let rising sun approve you lus,
To add more grief to aggravate my sorrow."
SPECIAL SYNTHESIS

Still let me sleep, embracing clouds in vain,
And never wake to feel the day's disdain.

Let me add one or two more quotations. Here is a sonnet from Watson (Sonnet 77, 1582):

"Time wasteth years, and months, and hours,
Time doth consume time, honour, wit, and strength.
Time kills the greenest herbs and sweetest flowers.
Time wears out youth and beauty's looks at length.
Time ditherto convey'd to ground both foe and friend,
And comfort only he that love, which has no end.
Time maketh every tree to die and rot,
Time turneth all our pleasures into pun.
Time causes wars and wrongs to be forgot.
Time cleas the sky which first hung full of rain.
Time makes an end of all humane desire,
But only this, which sets my heart on fire.
Time turneth into naught each princely state.
Time brings a flood from new resolved snow.
Time calms the sea where tempest was of late.
Time evts what e'er he may see below.
And yet 'tis me prevails in my b love,
Nor my time can make me cease to love."

And here are three stanzas from Drayton to which scores of similar ones from the same author might be added. Speaking of Fortune, he says (Tragedy, etc, 1596, stanza 37):

"A hap, a chance, a casual event,
The vulgur's tid, a child's terror,
A what to will, a silly sectian,
The mas of bliss, and the guise of error,
Nature's vindictive, folly's for her mirror.
A ter, a byw, id, a truth in learned,
A hearty, a laurel, a relic in learned."

Again (Tragedy, etc, 1596, stanza 120):

"Turn me not again from sleep,
Call up time, I say, say, thing to tell,
Unseal the secrets of the unarched deep,
Let out the prisoners from ïllusion cell,
Invoke the black inhabitants of ïll
Into the earth, steep dig, or let the light,
And with your dews clear up a cloudy night."

A so (Matilda, 1566, stanza 155):

"Our fond performers in but children's toys,
And, as a shadow, all our pleasures pass,
As years increase, so waning are our joys,
And beauty cruel, like a hou in glass,
A pretty tale of th' which never was.
All things decay, yet virtue shall not die,
That only gives us immortality."

2-7 — THE OBJECT OF SHAKESPEARE'S SONNETS

I have said that Shakespeare was but one of the sonneteers of his age. If we ask the object of Shakespeare's sonnets, we find that that also was
determined for him. I cannot enter into the question of how far it was a new departure to send to a friend epistles such as are the sonnets 1 to 126. Careful study shows that while it was no custom among the Elizabethans to address a long sonnet cycle to a protector, yet it was quite in the spirit of his times. Platonic love and excessive admiration were in no sense uncommon in that age. The notion of passionate friendship, with its implications, is not originated or added to by him. The sonnet cycles of his time almost invariably had love for their motive. His expression of devotion, humility, prostrate dependence, yearnings and loyalty are the stock-in-trade of all his fellows. They vie with each other in the attempt to prove their passion to be sincere and great. Indeed, Shakespeare is often cold and distant compared with some of the other sonnet writers, as if his inspiration came in great and sudden rushes.

Elizabethan poets wrote sonnets as readily as commoner folk say "How do you do?" Just as, in a storm, we see rain-drops wherever we turn, so sonnets almost drench the literary atmosphere of 1590-1600. The very rage of the downpour, however, indicated that the shower would not last long.

Though most sonnet cycles were addressed to ladies, yet we have many exceptions. Barnes, Constable, Donne and others wrote cycles of spiritual sonnets. Chapman apostrophised his mistress Philosophy. Harvey composed a diatribe against Greene. Barnfield addressed the boy Love. And almost everybody wrote dedicatory and other epistles in sonnet form.

208.—The Place of Shakespeare's Sonnets.

Looking now at the sonnets as a whole, we shall find no difficulty in placing them. Broadly speaking, we may now say that they did not bubble up in Shakespeare's mind, regardless of time and circumstance. On the contrary, our investigation proved that he was essentially a man of his period, that he absorbed his manner and matter from his environment, and that he but painted his life and thought of his adventurous age. That which is striking in the sonnets we have been forced to place to the credit of the spirit which swept over the land towards the end of the sixteenth century, and wherever he excelled it was by virtue of being an Elizabethan. One who reads Shakespeare and knows him well, knows the spiritual stress and delights through which his country passed. He is a type, a representation, a personification of his times. He stands for the genius of the Elizabethan era much more than for his own superiority. Subtract what he derived from his contemporaries, and not even a bold shadow of the man remains. He who honours Shakespeare, and not his times, cannot know how absolutely he was its product and its avatar. He only accepted the torch which was handed to him, the time's spirit confirming in him the apostolic succession of the church poetical. He was but a splendid variety of the splendid Elizabethan species, being supreme primarily because he was the son of a mighty age. A greater than Shakespeare could only come to a greater environment. With nothing but modern artificiality, pettiness and effeminacy about him, he would have remained an inconspicuous figure. He was fortunate in being hurled onto the rocks
of fame by the tremendous force of the Elizabethan groundswell, for the
impetus of his own nature was infinitesimal besides that given him by his
era. He was the favoured child of the fates.

I have consulted the following authors on the subject of the sonnets: Bodenstelt,
Sonette, 1862; Delius, Abhandlungen, 1878, pp. 1-47; Dowden, The Sonnets of W.
Shakespeare, 1881; Dunning, The Genesis of Shakespeare’s Art, 1897; Furnivall, The
Leopold Shakespeare, 1877, lxiii to lxvii; Gervinus, Shakespeare, 1872, i, pp. 560-602;
Massey, Shakespeare’s Sonnets, 1872; Sharp, Songs, Poems, and Sonnets of William
Shakespeare, pp. 1-36; Spalding, Shakespeare’s Sonnets, 1878; Tyler, Shakespeare’s
Sonnets, 1890; and Wyndham, The Poems of Shakespeare, 1898.

209.—Shakespeare as Dramatist.

Shakespeare was, conventionally speaking, no more original in his plays
than in his sonnets. It is superfluous to mention that we do not owe the
drama to him. Similarly, the blank verse which he employed he found
ready made. The important changes which that form of versification
passed through from the time Lord Buckhurst made use of it in Gieracle
have reached the point of its highest development, about the time of Shakespeare’s
death, were in the truest sense socially produced. There is no proof that
the scantier employment of endline stops, the increase in midline stops, the
use of weak endings, the subjugation of the metre to the delicate require-
ments of thought, the substitution of dignity for bombast, and the intro-
duction of prose when simplicity was imperative, are traceable to any one
person. The improvement was gradual and universal. There is not a
scintilla of evidence to show that Shakespeare, or indeed any one else,
took the lead.

It is a universal custom among writers on Shakespeare to speak of his predecessors—
Lilly, Marlow, Kyd, Nash, Peele and Greene—and to compare his work with theirs. The
implication here is that with the passing of his predecessors the whole stream of
dramatic literature was forced into a new channel, that of Shakespeare. Ridicu-
ous as is this position; evident as it is that there were numbers of dramatists following
Shakespeare’s predecessors; we have only to advert to the facts to see the weakness of so
many of the odious comparisons that fill the pages of works on Shakespeare. The sole
critic, to my knowledge, who has attempted to deal fairly with the matter, I mean Hazlitt
(On the Age of Elizabeth, 1821), wrote over eighty years ago.

The bard of Avon constructed his plays as his many fellow playwrights
did. He refashioned and utilised old plays; he dramatised English and
foreign prose tales; and he exploited Holinshedd and Plutarch. He wrote
now dramas and now comedies, and his busy pen was no more fertile than the
pens of his competitors. His subjects were the ones usually preferred, and
the chief characters were socially determined. Like his contemporaries, he took little care with his plots. His maidens, his villains, his
fools, his princes, his courtiers, his rabble, his lovers, were of the well worn
type then in demand. Again, the large number of the motives which guide
the plays accord with the common stage practice. Even his over-grown
vocabulary and his coarse scenes obeyed an evil custom.

* See, for instance, Symonds, Shakespeare’s Predecessors, 1900.
Attempts have been made, e.g., by Brandes (Shakespeare, 1898), to explain the nature of Shakespeare's plays from a consideration of the development of his individuality.* To me the social factor seems the decisive circumstance. The poet dramatised English history because that was the fashion; every dramatist was doing it, and had to do it, it being a question of demand and supply. So with comedies: they were in request, and they had to be written; and so also with tragedies. In the same manner Shakespeare's characters or scenes were strictly of the kind current at the theatres. He was no innovator. He was a strict conservative. The number of plays Shakespeare wrote would never have surprised an Elizabethan groundling, for most writers wrote as much, if not more, within the given time. The marvel vanishes if we reject the individualistic view in favour of a social one. Let us but admit that most plays were merely refinements of other plays or dramatisations of well known stories: that the treatment generally, including philosophical views, was, as a whole, determined previously; that all characters, whether Italian, French, Roman, Greek, were regarded as Elizabethans; and we can easily allow that play might be written in a short time. The supposed learning in Shakespeare must be explained by the same rules. Much of it was held in common, and a good deal of it is shown in many writers. If we make due allowance for what was social property, for what was expected of each dramatist, and reduce to their proper level the hasty generalisations as to Shakespeare's learning, we shall find little or nothing to excite our wonder. Shakespeare's large vocabulary is not extraordinary, if we think of the Elizabethan stage.

Shakespeare's powers of characterisation have been inordinately praised. He is supposed to have presented the various human types in perfection. As a matter of fact, few even among his riper plays contain really well drawn characters. In the earlier plays the unsuccessful striving to depict individuals true to life is evident; while many of the latest pictures are carelessly delineated. Only hero-worshippers go systematically into raptures over everything attributed to Shakespeare, magnifying every excellence, turning every fault into a virtue, and depreciating everything which he did not write. The scriptures of no race have ever been praised with greater ardour and less discrimination, and no worshipper has ever been more jealous of his god than is the pious Shakespearean. An impartial inquiry will minimise the differences between Shakespeare and his compatriots, and lead to a more comprehensive admiration for the later Elizabethan stage.

There is no lack of rhodomontade in Hamlet. For example, the gentle Ophelia, speaking of man exclaims: "How noble in reason! how infinite in faculty! in apprehension like a god!" This is far from being a defensible summary, and would be ridiculed if Marston had written it. Yet the latest authority on Shakespeare (Lee, Life of Shakespeare, 1899, p. 357) boldly declares that "to Shakespeare the intellect of the world, speaking in diverse accents, applies with one accord his own words: 'How,' etc., etc." Baynes (article "Shakespeare," Enc. Brit.), Brandes (Shakespeare, 1898), Coleridge (Notes on Shakespeare, 1883), Collins (Essays and Studies, 1895), De Quincey (Shakespeare, 1864), Delius (Abhandlungen zu Shakespeare, 1878 and 1888), Dowden (Shakespeare, 1875), Dyce (The Works of William Shakespeare, 1864-7), Elze (William Shakespeare, 1888), Fischer (Richard III, 1868, and Hamlet, 1896), Furnivall (The Leopold Shakespeare, 1877), Gervinus (Shakespeare, 1862), Guizot (Shakespeare, 1852), Hallam (Literature of Europe, 1854, iii, pp. 77-124), Halliwell-Phillips (Outlines of the Life of Shakespeare, 1887), Lamb (The Dramatic Essays of Charles Lamb, 1891), Massey (Shakespeare's Sonnets, 1872), Henry Morley (Introductions to Cassell's Shakespeare), Smith (Shakespeare.

* Robertson (Montaigne and Shakespeare, 1897) also ignores the Shakespearean environment, tracing Shakespeare's thought to Montaigne. So does Hudson (Shakespeare, 1872) who is otherwise judicious.
the Man, 1899), Taine (English Literature, 1886, ii, pp. 45-141), Ward (Dramatic Literature, 1899), Wyndham (The Poems of Shakespeare, 1898), and others, agree more or less closely with Lee’s estimate, on equally indecisive grounds. In this respect it is well to note the general admiration lavished on Shakespeare’s alleged power of suppressing his personality. Every character drawn by him is said to be photographed from nature. Strange to say, this does not strike every one. See what an extraordinary share word-play or quibble has in the comedies. Assuredly, there is no reason to believe that it entered as much into real life. Is it not rather our impersonal hero, masked, dealing thrusts and parrying them, because he could do it so well, having learned it from Lilly? Similarly with the broad humour: Lance, Jack Cade, the constable in Measure for Measure, the hostess in Henry IV, the clown in The Winter’s Tale, in Othello, and in Anthony and Cleopatra, the gravediggers in Hamlet, and plebeian figures generally, appeal all drawn to one familiar artificial pattern. The same holds good of the ladies and children in the various plays, as well as of the courtiers. Roughly speaking, the situations differ much, and the actors very little. Shakespeare delighted in drawing complex characters; but he only succeeded after struggling for many years. The Bastard is a failure, and so is Richard III. They are neither fish, flesh nor fowl. Prince Hal, too, is not what the dramatist would have made him a few years later. Through three plays—Henry IV (parts 1 and 2) and Henry V—Shakespeare vainly strives to make his hero intelligible, and has at last to resort to verbal explanations. Macbeth, King Lear, Anthony and Cleopatra, represent magnificent heights which their author only attained after the most desperate efforts and after many defeats. Slowly, very slowly, the artist gained control over his material. Many a character had he to draw imperfectly, before his ideal and its embodiment were, roughly speaking, as like as the two Dromios. Yet modern criticism represents this great Elizabethan as if he turned out characters as machines turn out flawless coins in the mint! When will Shakespeare and his age have justice done to them? When will Shakespeare’s biographers begin to study Shakespeare, instead of speculating about him? Up to the present, textual criticism has done its work excellently; but literary expositors have merely encumbered the road with theories.

It is remarkable that during his life time there was not one voice which singled him out above all others. He was considered as one of the first playwrights, and no more. He was neither over-praised nor over-blamed. He was never accused of being an innovator. He lived an obscure life like his fellows, and, like them, cared little for fame, doubtless because the people were satiated with first-class plays. Accordingly, we are not surprised to learn that Shakespeare’s philosophy was to the minutest detail part of the stock reflections current among the dramatists. The thoughts were adopted, and not prepared, by him. He is not the original thinker he is represented to be. That honour belongs to his age. The peculiar class of reflections which we find scattered throughout his works are employed, with variations, by the majority of the contemporary playwrights. His originality was everybody’s originality. We note one thing, however, that just as in the sonnets he is the poet who returns oftener to the impersonal element, so his dramatic works disclose the same trend. From his earliest to his latest play, this holds good. He is reflective in season and out of season. Everybody mouths it. In dust-heaps, in mole-hills, and in rocks, we catch the golden gleam. Every kind of stratum apparently, soft or hard, recent or primeval, contains and displays gold. It is impossible not to welcome the precious metal, even though we may think that a dust-heap is not the proper place for it. Still, the critic’s duty is to be above tempta-
tion, and while, therefore, greedily abstracting the treasures, we must question whether the dramas, as such, do not lose by the indiscriminate presence of fine language; whether it does not impart to them a certain artificiality and coldness; whether the Elizabethans were wrong, from the dramatic point of view, in differing from us; and whether the future will not take a middle course and sympathise to some extent with those who attended the earliest performances of Shakespeare’s dramas. In this place, however, we are only concerned to note that, roughly speaking, the impersonal element is more uniformly predominant in Shakespeare than in his contemporaries, indicating not originality but greater emphasis. This divergence, as well as his abundant use of metaphor, is probably accounted for by his particular line of development under his special circumstances; but on the discussion of this point I cannot enter here.

We have indications that Shakespeare was highly thought-of by his contemporaries. (Halliwell-Phillips, Outlines, ii, pp. 147-55.) That he was almost from the first regarded as one of the principal playwrights is not disputed; but beyond that the Elizabethans did not go. When, for instance, Meres (Palladius Tamia, 1598) speaks of Shakespeare’s ‘sugared sonnets,’ we must bear in mind both that the Elizabethans were fond of honeyed phrases (compare Meres’ reference to Drayton as ‘golden-mouthed’), and that the adjective was in common use. So, also, when the same author places Shakespeare first in one of his numerous lists, we have but to glance at the other lists to see that Shakespeare frequently occupies very low positions, and that, in truth, something other than a standard of merit guided Meres in allotting seats at the literary banquet. So it is throughout. Any other interpretation is due to the notion that the Elizabethans must have taken the same view of Shakespeare that most moderns do.

Utterances of a reflective character were common among Elizabethan dramatists. It would go beyond reasonable limits to illustrate this assertion at length. I will give two quotations instead. Marston, who is the author of what follows, was twenty-seven years of age when Antonio and Mellida and Antonio’s Revenge were published in 1602, the plays having been performed probably two years earlier, that is before Hamlet. I choose Marston’s words principally on account of his youth, and because of the early date at which he wrote. *

“Why, man, I never was a prince till now.
’Tis not the bared pate, the bended knees,
Gilt tipstaves, Tyrian purple, chairs of state,
Troops of pied butterflies that flutter still
In greatness’ summer, that confirm a prince:
’Tis not the unsavoury breath of multitudes,
Shouting and clapping, with confused din,
That makes a prince. No, Lucio, he’s a king,
A true right king, that bears do aught save wrong;
Fears nothing mortal but to be unjust;
Who is not blown up with the flattering puffs
Of spongy sycophants: who stands unmoved,
Despite the jostling of opinion:
Who can enjoy himself, maugre the throng
That strive to press his quiet out of him;
Who sits upon Jove’s footstool, as I do.

*Ward (Dramatic Literature, 1899, ii, p. 477) speaks of “the story of Antonio and Mellida (printed in 1602, but probably acted two years earlier).” Dekker’s Old Fortunatus, published in 1600, is another early play full of fine passages.
SPECIAL SYNTHESIS

Adoring, not affecting, majesty;
Whose brow is wreathed with the silver crown
Of clear content: this, Lucio, is a king,
And of this empire, every man's possesst
That's worth his soul.

Antonio and Mellida, act 4, scene 1.

Ant. "Why then should I put on the very flesh
Of solid folly. No, this cockcomb is a crown
Which I affect, even with unbounded zeal.

Alb. 'Twill thwart your plot, disgrace your high resolve.

Ant. By wisdom's heart, there is no essence mortal,
That I can envy, but a plump-cheeked fool:
Oh, he hath a patent of immunities
Confirmed by custom, sealed by policy,
As large as spacious thought.

Alb. You cannot press among the courtiers,
And have access to—

Ant. What? Not a fool? Why, friend, a golden ass,
A baubled fool, are sole canonical,
Whilst pale-cheeked wisdom and lean-ribbed art
Are kept in distance at the halbert's point;
All held Apocrypha, not worth survey.
Why, by the genius of that Florentine,
Deep, deep-observing, sound-brained, Machiavel,
He is not wise that strives not to seem fool.
When will the duke hold fee'd intelligence,
Keep wary observation in large pay,
To dog a fool's act?

Mar. Ay, but feigning [when] known disgraceth much.

Ant. Fish! most things that morally adhere to souls,
Wholly exist in drunk opinion:
Whose reeling censure, if I value not,
It values naught.

Mar. You are transported with too slight a thought,
If you but meditate of what is past,
And what you plot is pass.

Ant. Even in that, note a fool's beatitude:
He is not capable of passion;
Wanting the power of distinction,
He bears an unturned sail with every wind:
Blow east, blow west, he steers his course alike.
I never saw a fool lean: the chub-faced fop
Shines sleek with full-crammed fat of happiness,
Whilst studious contemplation sucks the juice
From wizard's [wise men's] cheeks: who making curious search
For nature's secrets, the first inmating cause
Laughs them to scorn, as man doth busy [punish] apes
When they will zany [mimic] men. Had heaven been kind,
Creating me an honest senseless doll,
A good poor fool, I should want sense to feel
The stings of anguish shoot through every vein;
I should not know what 'twere to lose a father;
I should be dead of sense, to view defame
Blur my bright love; I could, not thus run mad,
As one confounded in a maze of mischief,
Staggered, stark, felled with bruising stroke of chance.
I should not shoot mine eyes into the earth,
Poring for mischief that might counterpoise.
Mischief, murder, and—"

*Antonio's Revenge, act 4, scene 1*.

The Antonio plays of Marston are full of such moralisings. It is needless to say that Beaumont and Fletcher, Massinger, Ford and Webster, philosophise incessantly. For weight of language Webster's *Duchess of Malfi* seems unrivalled. I may add that all the great dramatists supplement Shakespeare as he supplements them.

The absence of the judicial spirit in dealing with the work of Shakespeare has made a somewhat controversial attitude necessary. The upshot of our examination is embraced in the statement that Shakespeare's dramas, like his sonnets, are so largely indebted to his environment that, by comparison, his own contribution, a very real thing, shrinks into utter insignificance, a ripple on a mountainous wave.

The extravagant praise of the great dramatist led directly to the theory that Bacon wrote the works attributed to Shakespeare. Incautious reasoning, however, could not stop there. So many other playwrights wrote in a "Shakespearean" vein, that the suggestion was made and accepted that Bacon wrote several hundred plays, and published them under different names. Consistency could hardly go further. The same problem is disturbing the Shakespearean camp. Almost scores of plays have been attributed to Shakespeare, besides those for which he is ordinarily held responsible. I shall not be surprised to hear some ingenious theorist suggesting that Shakespeare had a hand in the hundreds of Elizabethan plays which have in them any value. It is strange to see shoals of critics who believe that Shakespeare was *unapproachable*, now maintaining and now disputing the Shakespearean origin of a play or a passage.

210.—Obstacles to Genius.

Assuming that our critical scalpel has laid bare the truth with regard to Shakespeare, are we, therefore, justified in asserting that every man of genius is an expression of his age rather than a striking individuality? That, at all events, is the conclusion which I have laboured to reach. The psychological reasons are not far to seek. They lie within the limits of what we have already learnt in the previous chapters. Each portion of our nature contributes to the result.

(1) *Inherent Limitations.*—The realm of possibilities is only rivalled in extent by the realm of impossibilities. "Might-be's" are constantly balanced by "is-nots." In the first place the natural relations of things are not self-evident: we often fail to suspect them, and generally our guesses fall short of the truth. It is only when we weigh a matter carefully, when we give to it prolonged attention, when we allow observation to apply to it the touchstone of sanity, that we can feel at all satisfied about the quality of a resulting thought. Unforeseen difficulties, in what is seemingly a successful deduction, occupy us and prevent us from being otherwise engaged. The poet is compelled to test his little improvements, spending years in perfecting them. The architect applies his small architectural contributions, his life being absorbed in carrying out his limited ideals. The prose writer has to learn what style is before he can become
A competent critic. So it is in every department of knowledge: with the little reach the human brain yet possesses, the energy of the individual is burnt up in securing a comfortable resting place. The oasis of learning is so small that, like* children, we feel safe only in, or close to, our immediate environment. Not that bold explorers are wanting; for, indeed, if daring were always profitable, mankind would be revelling in the pearls of culture. As a matter of fact, it is the rule rather than the exception to fly to sensational methods for the purpose of wringing from nature her meaning, and forcing her pace. To leave, however, our environment far behind us, is to deprive ourselves of our native air, and to put ourselves at the mercy of wild beasts. Unsatisfactory as from an ideal standpoint the lessons learned by the race seem to be, they are yet a solid rock for us, and away from them we plunge into and are swallowed up by the ocean of possibilities. No sooner do we appear to alight on a great truth in our original investigations than we have our hopes almost instantly dashed.

A developed system of education, itself the result of study, will, to a considerable extent, increase men's powers; but in the present state of chaos, fruitful thinkers find that the fattest pastures lie nearest to the outskirts of the known.

With our present organism genius of the mythical type, except as a breach of continuity, is impossible. It takes a man a long time to acquire the rudiments of knowledge. Years pass in polishing, in mastering, and perchance to some extent perfecting these rudiments on the lines suggested by observation. Happy is he, therefore, who chances to live in a period which stimulates reasonable activity,* for he can then with advantage embody in his own attempts, as Shakespeare did, much of the work of his contemporaries. A man never creates a great environment; but an environment full of greatness has been the invariable antecedent of the men with whom we connect significant epochs.

Sully (Genius and Precocity, 1886) gives some statistics which bear on the question of precocity. Of 30 musicians, 18 reached eminence before the age of 25; of 42 painters, 28 before 25; of 49 poets, 28 before 25, 36 by 30, 45 before 40; of 35 scholars, 7 before 25, 9 before 30, 16 before 40; of 37 scientists, 14 before 25, 12 between 25 and 30, 8 between 30 and 40; and of 35 philosophers, 3 before 25, 4 between 25 and 30, 14 between 30 and 40, 6 between 40 and 50, and 8 after 50 (among these last are Descartes, Hobbes, Locke and Leibnitz). Sully holds that high development of special functions accounts for the divergences in precocity which the above list reveals. That is to say, the musician has tone-sensibility early developed; the poet an eye for form and colour; the scientist, mathematical ability; the scholar, memory. Singularly enough this congenital equipment is regarded by some authors as explaining the intelligence of animals, and is referred to as a proof of the absence of reason.

A similar line to that taken by Sully is exemplified in Gerard, An Essay on Genius, 1774, a solid book of the associationist school. This eighteenth century author holds that "Genius is properly the faculty of invention" (p. 8); that imagination is at the basis of invention (p. 31); that such imagination implies comprehensiveness (p. 42), regularity (p. 46) and activity (p. 57). In its turn imagination depends on the suggestions of sense-impressions (p. 95), on those of memory (p. 96), and on the laws of association (pp. 108-25); also on the power of habit (pp. 125-47) and that of emotion (pp. 147-84). Gerard contends that judgment is secondary, though necessary to a certain degree in
genius. On the basis of this analysis, he then argues that variety in genius is explained by the prevalence of certain exclusive characteristics in individual men, viz., judgment must be highly developed in philosophers, and taste in artists.

Galton (Hereditary Genius, 1869) holds the following view on the subject. Men differ very considerably from one another in ability, and that apart from education. The birth of a certain number of men of genius is, therefore, as determined as the birth of a certain number of those who fall far below the average, namely imbeciles. Genius being inborn, it is natural to infer that it runs in families; and this Galton attempts to prove at length. Being inborn, he reasons further, genius will and does assert itself. Two answers have been given to Galton's theory of hereditary genius. Royse (A Study of Genius, 1891) contends that there are scarcely any examples of several men of genius, of independent reputation, in one family (pp. 157-86). NorJau (Psycho-Physiologie du Génie et du Talent, 1897) further reduces Galton's eminent men to ordinary men in fortunate circumstances. Galton's theory, therefore, as far as its claim to be important goes, meets with difficulties. To the question of innate differences we shall return.

Spencer (Study of Sociology, 1880) insists that a man of genius cannot be conceived of independently of his environment (pp. 30-6). This is a trite contention, since it does not differentiate the man of genius from the ordinary individual, for granting that he is “a product of its [society's] antecedents” (p. 34), there is still the possibility that he is immensely superior to his fellows.

Allen (Nation-Making, 1878; Hellas and Civilisation, 1878; The Genesis of Genius, 1881) gives body to Spencer's shadowy view. He considers three elements as the vital ones in the making of a nation, viz., the stock from which a nation springs; the physical features of its habitat; and the time which has elapsed since its settlement (Nation-Making, pp. 590-1). From these three elements he deduces the differences in nations and races. For him great commercial centres are always genius centres. He says “Wherever we look, we see that intellect can only be produced by practical gains of brain-connection, made slowly generation after generation in the ordinary course of life, and finally culminating in a general average of high intelligence, varied by those exceptional deviations which we know as genius” (Hellas and Civilisation, p. 168). To this he adds: “Even a Darwin or a Spencer stands at a comparatively measurable distance from the average run of our naturalists and our philosophical thinkers” (The Genesis of Genius, p. 372). Indeed Allen holds that the bulk of progress is attributable to the efforts of the many, and that not a few are ready to enter the niche open for a great man (The Genesis of Genius, p. 374). Allen's fault, if we are to speak of faults, seems to be that his doctrine is too rigidly applied by him. He insists too much that both genius and milieux are products of the geographical conditions (The Genesis of Genius, p. 380), and that “individual characters themselves, in their totality, are wholly created by the external circumstances” (The Genesis of Genius, p. 372). He forgets that men are part and parcel of an environment, and that, therefore, there is action and reaction, though the one force may be more potent than the other.

Opposed to Allen, stands James (The Will to Believe, 1897). “The best wood-pile,” he argues, “will not blaze till a torch is applied” (p. 242), the blazing torch being the man of genius and the passive wood-pile the community. History, he reasons, is solely made by great men. They see to it that plans are carried out. “The community stagnates without the impulse of the individual. The impulse dies away without the sympathy of the community” (p. 232). And whence do these men take their origin? Here is the answer. “The causes of production of great men lie in a sphere wholly inaccessible to the social philosopher. He must simply accept guesses as data, just as Darwin accepts his spontaneous variations. . . . The visible environment . . . chiefly adopts or rejects, preserves or destroys, in short selects him” (pp. 225-6). And “physiological forces . . . are what make him” (p. 234-5). As regards these emphatic opinions, it is scarcely necessary to state that they have a decidedly speculative basis. James makes no attempt to analyse a single case.

Joly (Psychologie des Grands Hommes, 1883) has written by far the best book on the
subject under discussion. He rightly argues against Galton that inherited genius requires, as to its nature, as much explanation as any other conceivable kind of genius (p. 65). He holds that a man of genius is not merely a conspicuous figure in a community (p. 15); that he gives birth to a tradition which largely stifles the influence of others (p. 35); that he develops best when institutions are being founded or organised (pp. 37-8); that he "is evidently the culminating point of his race" (p. 53); that genius is creative and not destructive (p. 130); that he begins with being a genuine disciple (p. 141); that his apparent spontaneity is the result of accumulated reflection (p. 231); that his primary gift is to conceive something great (p. 260); and that in him must be embodied enthusiasm, perspicuity, breadth, imagination and power (p. 270). "At a given moment," Joly sums up, "the man of genius is for the life of his country and his epoch, that which the laain is to the complex organism, co-ordinating everything, disciplining the subordinate forces, and directing all things towards a single end, while receiving nevertheless his nourishment from the infinitely minute labours and actions of the organism which he animates" (p. 274). From this it will be seen that Joly still fails to note that the man of genius lives in an atmosphere of genius, and is but its fairest product; and, what is more, that the genius theory is largely a convenient social convention, since it enables historians to summarise the work of a period in a simple way.

Nordau (Psycho-Physiologie du Génie et du Talent, 1897) has the following theory on the subject. What is inherited is that which is commonplace, while that which bears promise indicates deviation from the type (p. 17). The essential qualities of a man of genius lie in the power of elaborating in his own fashion the apperceptions of the outer world (pp. 54-5). Genius is something inherent, while talent is produced by labour (p. 59). A powerful development of the centres of judgment and volition represents the physiological basis of what we call genius (p. 147). Hence there is no such thing as genius among painters, poets, etc., since these are dependent on emotional development (p. 157). Altogether there are four classes of genius, viz., thinker and actor—statesman; thinker and experimenter—scientist; thinker—philosopher; and, by courtesy, artist—poet (pp. 160-5). Nordau makes no attempt to verify or test his theory.

(2) Organised Reaction.—We have seen how intrinsic are the difficulties which lie in the way of striking originality. One more obstacle may be added to those already discussed; it is furnished by organised reaction. It requires years to cut a path through the granite of a difficult subject, and when at last we have arrived at our journey's end, it is an exasperating task to obtain even a modicum of freedom. Suggestions having been along a certain line, ceaseless effort is needed to resist the dead weight of custom. New furrows have to be dug, old ones have to be filled up. The Herculean undertaking involved is too great to be performed by any one; but a giant, and giants are creatures of the fancy. Only shallow persons readily turn from one subject to another; and the world can hope for little from them. It is probable that mastery profoundly impresses the brain structure, so that it is not easily impressed again to much purpose.*

(3) Needs.—If the argument from organised reaction is convincing, that drawn from the orderly succession of needs further strengthens it. We are not like candles which give a uniform flame from the time they are kindled to the time they are extinguished. * The brilliancy, the colour, and

* Even this, however, requires correction. In the great Italian period we find men eminent in a number of pursuits, men like Michael Angelo, Leonardo da Vinci, Galileo, and many others.
the size of the flame of our life, vary ceaselessly according to a certain plan. Accordingly, while we are children, or during adolescence, there exists no tendency to strike out original paths. So also when we are past maturity our power declines. There is, therefore, only a restricted portion of our life time available for original research, while we must consider, besides, that during the first third of life we fall into the humdrum ways of our fellows, and that organised reaction largely fixes us there.

211.—Men of Genius.

To all this it may be objected that granting Shakespeare's indebtedness, and admitting that normally men are necessarily unoriginal, it still remains a moot point whether what is called genius is not largely exempt from the instrumentalities which clip the wings of the common flock. This objection is valid theoretically, but not otherwise. As a may-be it cannot be rebutted; for what is there that may not be? As a question of fact, it is contradicted by the teachings of history.

I have shown in detail how dependent at least one man of acknowledged genius was on his environment. It would be humanly impossible and monstrously unprofitable to analyse the labours of all those inscribed on the roll of fame, and it must suffice, therefore, if we can generally trace the same apparent relation between the individual and his age as we have done in the case of Shakespeare.

The genius of Raphael is a commonplace everywhere, yet he stands in no way isolated. It would be an illustration of pure originality if, among a savage tribe whose individual members hitherto neither scribbled nor scrawled, one of them took to painting in the style of Leo the tenth's period. That man would be compelled to discover the canvas on which to paint, the colours and the brushes, the nature of perspective, and the whole mystery of art. Such a state of things involves no contradiction; it is only one which has never been observed. As we should expect, we find that the agreement between Raphael and the host of superb painters of the Renascence is almost infinitely greater than the difference. If only Raphael (died 1520) could be proved to have painted his pictures a century earlier, there would then be some hope of discovering a sudden and startling departure in style from his brethren in the craft. As it is, his work determines the time of its production, and his time determines its qualities. The distance between the drawings on mammoth tasks, or the pictorial attempts of low-class savages, and the golden era of art in Italy, can only be bridged by microscopic arches made of the life work of an imposing procession of successive workers, influenced in each case more particularly by their environment as far as it affected the products of the brush. Egyptian, Chinese, Japanese and Greek paintings vary in essentials, and in no instance is the difference the result of the efforts of single individuals. Manner and matter are historic products. The painter's Madonna tells a long story of improvements. No one man created her.
In architecture the ceremonial pace of progress is clearly traceable. Nobody would dream of attributing to the illustrious Sir Christopher Wren all the art exhibited in St. Paul's Cathedral. The mud-hut has a history; and the conception of a magnificent structure like that we are speaking of is almost entirely a result of evolutionary processes. The several styles employed by Wren have each a tale of their own to tell. Nor is the general plan of the building original. If root-and-branch originality were possible, it would be strange that the few architectural styles which we, and other races, possess, should have been evolved in so deliberate a manner. There is scarcely a minor style, such as the perpendicular, but has developed by slow degrees.

The above brief remarks on architecture find ample corroboration in the works of Ruskin. In that great art critic's Seven Lamps of Architecture the reader will see many illustrations of the very slow and almost accidental growth of architectural styles. So convinced is Ruskin that individual genius by itself is powerless that he ridicules the present-day architects who are too proud to be disciples, and contends that no great English architecture will arise until a school of architecture has been established of which the mass of English architects shall be followers. One beautiful passage well brings out the truth that not individual but social genius produced the art exhibited in the great cathedrals. "It needs but little inquiry into the spirit of the past, to ascertain what, once for all, I would desire here clearly and forcibly to assert, that wherever Christian church architecture has been good and lovely, it has been merely the perfect development of the common dwelling-house architecture of the period; that when the pointed arch was used in the street, it was used in the church; when the round arch was used in the street, it was used in the church; when the pinnacle was set over the garret window, it was set over the belfry tower; when the flat room was used for the drawing-room, it was used for the nave. There is no sacredness in round arches, nor in pointed; none in pinnacles, nor in buttresses; none in pillars, nor in traceries. Churches were larger than most other buildings, because they had to hold more people; they were more adorned than most other buildings, because they were safer from violence, and were the fitting subjects of devotional offering: but they were never built in any separate, mystical, and religious style; they were built in a manner that was common and familiar to everybody at the time. The flamboyant traceries that adorn the façade of Rouen Cathedral had once their fellows in every window of every house in the market-place; the sculptures that adorn the porches of St. Mark's had once their match on the walls of every palace on the Grand Canal" (The Stones of Venice, 1888, ii, pp. 153-4).

Machinery, and what more marvellous modern product is there, displays all those indications of development which we should expect to find. The locomotive was not invented by one man; the latest type of battleship has not been thought out by one individual; the rotary printing machine boasts of a long history. Thus while the series of mechanical inventions is endless, each is a slight variation of some previously existing form. The machinery employed in the large industries is the result of favourable social conditions on the one hand, and the efforts of a large class of inventors on the other.*

The history of astronomy offers another appropriate illustration. Had Laplace written his Traité de Mécanique Céleste without consulting his forerunners, we should have a marvellous book before us. As it is, as-

* See Holson, Evolution of Modern Capitalism, 1894.
tromoners were court favourites thousands of years ago; they had every opportunity for original research; they were often enabled to spend their lives in studying the tidal star wave, and yet progress was deliberate and almost imperceptible. So with Newton. The way had been paved for the Newtonian theory by the unwaried researches of Ptolemy, Copernicus, Tycho Brahe, Galileo, Kepler, and thousands of humbler mortals, and but for these, the name of Newton would be unknown in connection with astronomical discovery. Without the succession of a file of thinkers, neither Laplace, nor any one else, could hope to discover a great truth. Newton is accordingly commonplace when he tries to pierce the secrets of astronomy beyond contemporary stellar achievements.

Lectures, laboratories and text-books have familiarised the present century with the spirit of science. Yet that blessed influence is not the outcome of any one person's labours. There is not even an individual with whom the notion is connected, and it grew through centuries before it assumed definiteness. No one whispered to himself "I will be scientific," and lo! science was; but many toiled, now hoping and now despairing, until the darling of time was given birth to. And not even yet has this Ariel found his Prospero. Men are trained in scientific method by imitating others rather than by knowingly following its mandates. When once, however, the theory of science will be reduced to rules, we rightly expect that it will introduce the greatest revolution the world has ever witnessed. Learning will then be no longer the privilege of the few, nor shall we have to cling so desperately to the past.

One of the most significant results of modern research is the evolution which it has traced in religions. The tendency at one time was to make an individual responsible for the establishment of a religious system. As a band of lightning illumines for an instant the sullen darkness, so these legendary heroes were supposed to shed a momentary gleam into the surrounding spiritual night. Diligent criticism has dispelled this illusion, and has shown that a religious genius owes as much to the past as a poetic genius. The one is no more original than the other, for they are both representatives of their age. Accordingly, wrest from Confucius his rich environment, and as little is left as of Shakespeare under the same circumstances. He was only one of the luminaries which appeared before the dawn—for Taoism dates back to his time,—and his light was strong because it represented the ardour of China's past. Confucius was no self-centred recluse. Again, when Buddha preached his gospel of love and reason, he was but a mighty echo of India at her best. As with Shakespeare, so with Buddha, scarcely a notion can be proved to have originated with him. The great Nazarene also was not born out of his time. He was its child: the lineal descendant of the Hebrew prophets and of the environments which made these. He embodied the accumulated development of the morality of his nation, and his teaching can, therefore, be placed as readily as that of Shakespeare. His insight was the stored result of ages of zealous reformers. Unless he turned his back on his time, he
was compelled to speak as he did. As the Elizabethan breathed poetry, so the age of the Nazarene breathed religion, and for both developments there was an environmental reason. Thus whether we turn to Socrates, to Zoroaster, to Laou-tze, or to minor heroes such as Luther and Knox, the telling element is still the social factor.*

In the light of this chapter the individual, by himself, is a puny, worm-like creature, and only becomes powerful and dignified when he represents the race owing to his having absorbed part of its accumulated intellectual treasures. It is for this reason that men thrown much on their own resources in any sphere, as, for instance, in matters of morality, become fanatical and narrow-minded. The good can no more be guessed at than can the wise or the beautiful. It is, therefore, a deeper want than mere superstition which makes men shudder when they contemplate being robbed of their sacred books. These books, being the outcome of much tribulation, contain a considerable amount of the wisdom of a race, besides being interpreted at any historic period according to some fixed and well understood method. Hence the individual believer, who feels his helplessness, naturally dreads being thrown back on himself; and he does well not to give too readily an ear to those who wish him to find the moral law within himself.

It follows from the foregoing that an ethical system should be a reflection of the profoundest generalisations based on observation, rather than a collection of maxims. The moral system which only in a general way inculcates virtue, duty and love, is bound to fail when it has to face the complex world of social and physical facts. On the other hand, a system of ethics like that of Confucius goes far to satisfy a right ideal. This Chinese thinker demands that men should be educated; that want shall be far from them; that the powers that be shall be just; that law shall have regard to reasonable social conditions and to circumstances; and that in all the relations of life obedience, for young and old, shall be conditioned by righteousness. Hence the vitality and the longevity of the Chinese nation. Scientific ethics will, therefore, seek to determine all those many conditions, psychological, physiological and environmental, which shall enable us to see the good and to embody it in our actions.

Whatever subject we investigate the same view is forced upon us. Man's progress depends on the ages, and man's genius rests on the explosive instability of their time. The history of the race is the grindstone on which the intellect is sharpened, and all that man can do, therefore, is steadily to enlarge and purify the realm of knowledge. The intricacy of unattacked problems; the period required to put them to the test; the organic tendency to cling to cherished opinions; the short period of years during which we are capable of the work, all tend ruthlessly to restrict original productivity. Entirely exceptional men are conceivable; but history presents us with no example. Our only hope, therefore, lies in the solidarity of man's endeavours, in the possibility of disentangling for educational purposes, the chief factors of the reasoning process at its best. When this is achieved, man will have risen as much above his past as the primitive man rose above his ape ancestors.

The preceding analysis has, I hope, shown the environmental factor in genius. Our great man, so far as his greatness is concerned, is neither independent of his environment, as James and Galton suggest; nor is he a mere tool in the grip of his environment, as Allen appears to think. Both, environment and man, are real factors and actors. We should probably be right in holding that a Newton is somewhat the superior in shee

ability to any of his scientific contemporaries along his line of research; but that his success is due more to his times than to himself. I therefore, disagree with Galton’s and James’ conception of the ability of the man of genius. Allen well says: ‘Except in a generally mechanical race, you will not find a Watt or an Edison; except in a generally literary race, you will not find a Shakespeare or a Goethe; except in a generally aesthetic race, you will not find a Leonardo or a Beethoven. We never see an inborn Raphael at Memphis discovering all the laws of perspective off-hand; we never see an original Channing or Howard springing at once into existence amongst the head-hunting Dyaks; we never see an incongruous Newton hitting suddenly upon the law of gravitation in some Zulu village’ (The Genesis of Genius, p. 373). The primary reason for the condition pictured by Allen we have seen to lie in the greatness which has been accumulating in the great man’s environment. This notion is well expressed in a passage of Joly’s book. ‘The women of the seventeenth century, says Ste-Beuve, write with an infinite charm simply because they wish to do so; they all have the gift of expressing themselves well; and Mme. de Sévigné is only the first in a numerous assemblage’ (Psychologie des Grands Hommes, 1883, p. 114). Again, men do not usually allow for the fact that sciences and arts have in most cases developed apart from men of genius; and that where great men played a part, as in Newton’s or in Darwin’s discovery, there the truths would generally have been arrived at without them, though not so soon. Royse (A Study of Genius, 1891) agrees to a certain extent with James. He instances the following men as influencing their environment as from the outside: Chaucer, Dante, Shakespeare, Goethe, Richter, Burns, Scott, Byron, Hugo, Dumas, Dickens and Hawthorne (ibid, p. 282). The truth of our theory with regard to these men is obvious. Royse is in error owing to his looking upon the environment as always meaning the populace. There is no need to accept so arbitrary a definition. To us the environment means any system of forces within the environment, as the dramatic world or the poetic world. Accordingly, if we take the names enumerated one by one, the social factor will in each case appear prominently. Chaucer, for instance, the first in the list, largely translated his tales from Boccaccio’s Decamerone; Dante lived in an age of intense activity; Goethe had Schiller, Lessing, and a host of literary men about him; Scott and Byron were surrounded by Wordsworth, Keats, Shelley, and a galaxy of minor stars; and Dickens was one of a great hierarchy, constituted by Lytton, Scott, Thackeray, George Elliot, and himself. James attempts to account for this invariable grouping of great men by sudden showers of men of genius (The Will to Believe, 1897, p. 243); but the facts laugh to scorn such far-fetched explanations. Voltaire has around him Diderot, Rousseau, D’Alembert, and many others; Beethoven has an environment of genius; Raphael is in the same position; and so with great men everywhere. The man of genius is apparently always a dweller in a sphere of distinguished mortals. Were Galton and James right, such would not be the case; but there would be as constant a stream of men of genius as of imbeciles. The conclusion, then, is that men of special, though not of extraordinary, sensibility in some direction, tend to become pre-eminent when, and only when, the environment has duly prepared the ground. Sometimes these men are of little importance; sometimes they are of great importance; and sometimes they are absent when their presence would be a great boon.

The following facts may be noted in addition. If we take the case of Charles Darwin, for instance, we find that until the publication of his Origin of Species, he was merely considered one of many eminent men. When he had written the latter work, he was regarded as a man of genius. Yet if we leave out of view Darwin’s principle of Natural Selection, that last work does not strike one as essentially different from any of his former ones. The difference, therefore, lay not in the workmanship, but in the conception. Yet this conception had grown for nearly a century, so that Darwin did little more than weld a brilliant conception with arduous research. His ‘greatness’ was, therefore, chiefly due to the presence of a problem which he could solve. In its absence, Darwin would have been an eminent man of science, but not great. Every age has in this way many men who are potentially great; but who never become great because there
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is no opening for them. Imagine Darwin grappling with the problem before it had reached the acute stage, and he, too, would never have been spoken of as a man of genius.

There remains only the problem of the relation between Insanity and Genius. The question was first pressed in modern times by Moreau (La Psychologie Moribide, 1859) who boldly contended that the man of genius is a species of madman, saying: "Genius . . . has necessarily its material basis, and this basis is a semi-morbid condition of the brain" (p. 465). He based his argument on the supposed prevalence of neurotic characteristics among great men, arguing that "the pre-eminence of the intellectual faculties has for its organic condition a special diseased state of the nerve centre." (p. 481). Flourens (De la Raison, du Génie, et de la Folie, 1861) attacked Moreau, claiming that the essence of insanity is unreasonableness, whereas the essence of genius is pre-eminently distinguished by its reasonableness. Lamb, who died in 1837, had already written, "The greatest wits . . . will ever be found to be the sanest writers." (The Essays of Elia, ed. 1890, p. 220). Joly (Psychologie des Grands Hommes, 1853) showed most clearly that the presence or absence of marks of insanity had nothing to do with genius as such. Napoleon, for instance had a terrible temper, but his greatness lay not in his temper but in his generalship (pp. 83-4). The same thing is true of the hallucinations, epileptic seizures and fits of insanity, attributed to great men. Radestock (Genie und Wahnsinn, 1884) traces back the various eccentricities to a highly-strung nervous temperament; and reasons that much of the excess might be prevented if the man of genius carefully regulated his habits. Sully (Genius and Insanity, 1885), a year later, expresses himself thus: "No elaborate calculations are needed, I think, to show that mental malady occurs too often in the history of genius." (p. 959). At the same time he argues that great mental tension, fine sensibility and bitter disappointments, are the chief explanation of the vagaries of men of genius. In 1891 two books appeared on the subject in English. Lombroso (The Man of Genius) bluntly tells us that "genius is a neurosis." (p. vii). Ignoring what Flourens and Joly had said, he sets about finding traces of extravagance in great men, and naturally finds them. He does not take any one life as a whole for the purpose of carefully balancing the reasonableness or unreasonableness in the man. A single hallucination, a single fit of temper, is sufficient for him. He does not reflect that such a standard of insanity applied to the bulk of men, under anything like trying circumstances, would prove that all mankind is raving mad. Lombroso's volume is only a store-house of tittle-tattle. Indeed, every anxious businessman, student, artist, he be ever so humble, shows precisely the characteristics which Lombroso wishes to make the mark of genius. The second book I would refer to is that of Nisbet, The Insanity of Genius. It says: "Apparently at the opposite poles of the human intellect, genius and insanity are, in reality, but different phases of a morbid susceptibility of, or a want of balance in, the cerebro-spinal system" (p. xv); and "What runs in the blood is nerve-disorder, of which genius is the occasional outcome" (p. 325). To prove his thesis Nisbet seems almost to hint that the very fact of a man of genius dying is a proof of his insanity. At all events, the presence of one out of a multitude of diseases in some one related to the man of genius, appears to this author to bear out his contention. Let him apply this test to any section of men, and there is little doubt as to the result. Besides, as has been repeatedly said, it is Carlyle's or Socrates' strenuous sanity which make them dear to us, and hence the explanation of their temperaments or their visions leaves the question of genius an open one. Nordau (Entartung, 1892), stimulated by Lombroso, makes a new application of his master's principles. To our author, Whitman, Rosselli, Swinburne, Ruskin, Nietzsche, Ibsen, Zola, and every one else of note, is a neurotic of a very objectionable type. In fact, any deviation from the common in a writer or artist, seems sufficient to brand that man as a victim of mental degeneration. Hirsch (Genie und Entartung, 1894), a medical man, criticises Lombroso and Nordau. His line of argument may be summed up in a sentence of his: "Genius resembles insanity, as gold might be said to resemble brass." (p. 126). In accordance with this view, he denies that most of the extravagant traits enumerated in men of genius are marks of insanity. When, however, Hirsch analyses the concept genius itself, he is unsatisfactory

211.—INDIVIDUAL CHARACTER.

I have traced in Shakespeare what distinguishes him from the moderns, and what produces his resemblance to his contemporaries. I would now attempt the solution of another aspect of the problem dealt with in this chapter. Granting the likeness between Daniel and Shakespeare, we nevertheless do not confound the two men. There is something which impels us to distinguish between the poets, and this something I propose to analyse.

Examining the Sonnets we find that apart from their subject they bear a general resemblance. The similes are of a recurrent type. The vigour which we encounter in a few poems, we come across again and again. The tendency to deep-brained reflection of a certain order constantly asserts itself. The references are like in character. Were every few sonnets to suggest different philosophies of life, different treatment, different technique, we should suspect that more than one hand took part in their composition. We expect, and we find, uniformity. By Shakespeare everybody understands an individual with certain definite characteristics. There is a note, a tone, a breath, in what he writes, which betrays the one source. A good Shakespearean scholar tells, by reading a sentence or two, whether a passage is Shakespeare's or not.*

Evidently there is some uniformity underlying the typical characteristics of the individual. Looking at the question apart from the lessons of life, we wonder at this rigorously restricted range of a man's character. If ten men have ten different characters, why should not one man have ten characters? Why should not a man change his character repeatedly, or why should he possess a character at all? One is at a loss how to answer these questions from a "spiritualistic" point of view. Fortunately, our appeal to facts encounters no difficulties.

In the chapter on Re-development we saw that the powers of re-development were limited. Were we able to re-member with ease and completeness all that has happened to us, we should have a stock of knowledge to draw upon such as is now beyond human reach. As it is, the memory is perishable, and the record of events, in so far as it is not concerned with living interests, is reduced for lack of being referred to, whence results almost total oblivion as to childhood and ordinary affairs. If our interests were unlimited in range and depth, then, ignoring the over-crowding of thoughts, our memory might be nearly perfect. However, many interests, probably because of the inadequacy of brain-tissue, cannot co-exist, and when these press hard on each other's domain, there ensues a death struggle among

* This is not so easy since the Shakespearean text is frequently corrupt.
the units of thought and action, which puts an end to overcrowding. Hence our interests are few, and, therefore, activity and memory are restricted.

Organised reaction also plays no small part, for both the acquisition and the manipulation of notions are strictly limited functions. The plasticity of early childhood (to about the age of six) is remarkable, and as much can be done during that period towards laying a solid foundation as towards making a good one impossible. The time is past when reason or enthusiasm alone can be supposed to decide what we are capable of doing, and it is admitted on all hands that it is fatal to leave education to these two stimuli. The light of reason soon begins to flicker and pale: and the heat of enthusiasm is soon spent, when they have trends against them. Shortsighted interests are like vertigo; they make our thoughts spin in a small circle from which they never escape. For this reason, tendencies the existence of which we do not suspect, and the origin and tenor of which are unknown to us, determine our intellectual life to a critical extent. Were we born thinkers or were those who had charge of us thinkers, the evil might be considerably mitigated. As matters stand, our character is largely a question of accident. The manner of our reasoning, our temperament, our active impulses, are rooted by the time we begin to think over the propriety of things. With age preventing vital changes, and every stage of human life having its separate instincts, it becomes impossible to do much in later life. Thus opinions, the inspirers of thought, without our being aware of it, obtain an ever greater hold on us, till they control our veriest existence. So often do we refer to them that our whole thinking becomes coloured by them. These ever-present forces are responsible for our character. This uniformity is apparently no accident of history, and we have to choose between it and a shallow, unstable character. The nature of the brain, or our method of education, allows no other alternative.

This must not be construed to mean that character is something purely individual. Only one aspect of it is so. The outfit is copied from the environment, and then the special circumstances—the position of a notion among other notions, the individual's place among his fellows, and the physical structure he starts with—determine and, in so doing, slightly modify, what is learnt. In this way are produced the marks which Sunder man from man.

Our "soul" does not invent or discover; and then cling to truths from choice; but life supplies us both with material and with the power of shaping or mis-shaping it. Apart from growing observation and the nervous system as we know it, character is meaningless. Our judgment, our reason, our imagination, our fertility of resource, our power of thought, are moulded according to the general facts which have been expounded in the previous chapters. The sparkling wit, the poetic nature, the philosophical mind, the lover of his race, would not be what they are, were it not for the peculiar workings of the brain. Wit, fancy, aphorism and moral insight cannot be considered as home-bred. They are the final result of a specially adap-
tive organism. We might as well expect an unadulterated specimen of the Bushman type to be at home in a West End drawing room as to hope for anything that is not the result of organised reaction. Our characters are not created, but evolved. The uniformity in human nature is not the consequence of choice, but of organisation.

From the impossibility of men being to any extent inventive, it follows directly that they must be a mirror of their times. Their restricted ability prevents their being so to speak more than moulds, casts or shadows of something larger than themselves. The net spread by the community hauls in everybody without exception, and it is for this reason pre-eminently that men are social beings. So, too, the civilised man, or the man of culture, is an absurdity apart from a civilised and cultured social state. Men take their cue from their environment. Hence not only in large matters, such as philosophy or art, but in the pettiest details our being is derived from a higher source. Even the manner of our thought, as we saw, results from contact with our fellows who embody a hoary tradition, and there is in us, therefore, infinitely more of others than of ourselves. Accordingly, the difference between myself and the fowls which walk about in the field before me, is that I am naturally a much better pupil, and if I had no more native taste for learning than they have, there would be little difference intellectually between us. Being dead to the past I should be dead to all that the words Civilisation and Culture imply. The difference, again, between one able man and another lies in the peculiar development of some sense or power, the painter’s for colour, the musician’s for sound, and the thinker’s for strenuous thought.*

Absence of originality bounds us on every side. Our interests, as well as our facts, come to us, and are ours, only in the second resort. What we feel most, what stamps us most in a calm and quiet hour, what represents our views on birth, life and death, is borrowed. The isolated human creature never evolves rational conception. All he can do is to slightly improve or mar what is put before him. He may favour this problem or that; but it must be a socially produced problem. Nay more, it must be a live problem. Constantly hearing of the issues which stir the times; having them dinned into our ears; learning them at our mother’s knee and from our teachers; finding them incessantly referred to in literature and in our intercourse with others, we become tacitly attuned to them. The present, by the structure of the brain (sec. 108), appeals to us most forcibly. It forms the normal food of thought. The problems which rouse a generation, and, in a lesser degree, a section of it, are by the nature of the case ever with us. Our daily thoughts, therefore, run in that direction. The growing capacity for thinking and enthusiasm ever encounters one set of notions: we are whirled along by them; and, according to minor determinants, we end by taking sides more or less with one existing party or another. The interests and feelings of individual men are, therefore, as much due to infection, to magnetic transference, to a sympathetic thrill, as

*Sully, Genius and Precocity, 1886.
the store of their knowledge is due to communication. From every direction the social impetus, like a glacier, carries us quietly but irresistibly along. It is, therefore, only the action of the mass of men that can appreciably influence the social pressure, and in this way we obtain the changing characteristics of a race. Hence the spell of the past is despotic. Not that men are patient under that rule, for they constantly tend to throw it off, fighting desperately against being dependants. This revolt forms the second great moulding force of developing humanity. We do not readily allow ourselves to be buffeted about by the chances of fortune. We resist, and though the resistance can avail us little, yet that little determines the rate and the direction of progress.

The hero worship of the old type is indefensible. We praise Shakespeare, and ignore, and almost contempt, his fellows. The array of poets who in the sweat of their brows fashioned the tools which Shakespeare used; the virtues of style discovered one by one by the meditations of the many; the power and passion with which his age supplied him, are forgotten. Yet take these out of Shakespeare's mind and heart, and where stand his magnificent works? Rational worship should be period worship, an admiration for the spirit which braced the times. The Elizabethan age, and Shakespeare only secondarily, should receive our gratitude. At most, a genius should be admired as a partial embodiment of a great era.

Recognition depends on character; that depends on uniformity in human nature; and that again on the psychological principles referred to in previous chapters. We saw in the last section how faithfully great men mirrored their world. We will note here how perfectly they hold up the glass to themselves. Shakespeare spoke in his works with no uncertain tone, and so does every one, great or little. This is strikingly illustrated in many ways. A lover of paintings who sympathetically visits the great galleries of Europe, will bear testimony to this contention. Entering for the first time a suite of rooms, in some famous gallery, he knows almost at a glance who were the painters of the various pictures. Within a few seconds he traces to their source a dozen works of art. Correggio, Tintoretto, Leonardo da Vinci, Raphael, Dürer, Sir Joshua Reynolds, Fra Lippo Lippi, one and all are recognised without hesitation. To the practised eye deception is almost impossible, except where there has been deliberate imitation. Who could look at a Velasquez, and not tell it from a Murillo; or a Rubens, and not distinguish it from a Rembrandt; or a Correggio, and not differentiate it from a Raphael? For reasons I have already insisted upon at great length, no one can be a Velasquez, a Murillo, a Rubens, a Rembrandt, a Correggio, and a Raphael, all in one. The facts, as we see, unhesitatingly confirm our statement.

As with painting so with poetry. A few lines recited to a connoisseur at once betray the author. Longfellow, Whittier, Lowell, Tennyson, Browning, Swinburne, William Morris, Shelley, Keats, Wordsworth have they not each a certain something, a spiritual signature attached to their words, by which they are almost instantly recognised? Their individual vocabulary,
their sentences, their similes, their fancies come from the same foundry. Viewing an exhibition of Watts' collected pictures, we observe a striking similarity between them. A few hundred yards off, and on the same day, we see Lord Leighton's pictures. How like these are to each other; how different from those of Watts. Thus, looking through any two poets, we cannot help noticing the surprising unity there is in each of them, while they differ equally from each other. The individual's range is almost petty; the products of his time are almost indistinguishable; only the canvas of history is impressive.

It scarcely needs to be stated that what is true of painting and poetry is true of all subjects and all men. The psychological machinery explains the fixed and narrow boundaries of the individual. Character—individual, national, racial, human, animal—is a necessary product. Dissociated from its psychological connections, its fixedness and limitation lose all meaning.

213.—Relation to Needs.

The Sonnets are an imperfect representation of Shakespeare's life. They delineate him at but one stage of his normal existence, and even here the tale is of necessity incomplete. His topic was more circumscribed than his nature, and we must, therefore, guard against too hasty generalisation.

We know that needs are the motor power of our existence; that as far as these vary in quantity and quality, so our characters vary with them. We are not aware of any abstract reason for the existence of the nature of human needs; we have to accept them as evolutionary products. It is well, therefore, duly to appreciate the importance of a true conception of their changes, for on account of this property of needs, character, in the larger sense, is not fixed. The study of the pictures of Sir Edward Burne-Jones or the collected poems of Tennyson is misleading in this respect. There is in them a comparative uniformity which is not characteristic of the painter and the poet, except in their professional capacity.

The characters of the babe, the child, the youth, the young man, the matured man, the middle-aged man, the old man, the dotard, are not determined in the first instance by social institutions or individual predilections. It is no accident that puppies, kittens, kids, lambs and the host of other mammals spend the first portion of their existence largely in play. It is their inherited nature to do so. In this way the needs of individuals vary with their age. The character of the new-born Shakespeare differs immensely from the matured man with a history: the former is interested only in sleeping and feeding, the latter's interests are too many to be enumerated. The fixedness is still an attribute; but the needs being different, the character is different also. It would be tedious to follow the development of the child into the man, and the man into the dotard. All we have to recognise is that our needs vary with our age, so also does our character, and that such development is natural. It is the naivety of human nature which makes child and man forget that their point of view is often one which only covers their age. It is amusing to
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hear a damsel of seven gravely pronouncing judgment; and it is sad to observe in one who has reached maturity a want of appreciation of the limitations of childhood. 'We nearly always live in the present, and view things in general from that standpoint. In the ardour of youth we swear eternal love and complete devotion, for the present is too all-pervading for us to appreciate the changed needs which must ensue. We live not only as if we were going to live for ever, but as if human nature were not subject to change; when, as a matter of fact, it is ever changing, though in accordance with a determined order.

Looking more closely into the question, we may be said to possess, as has been shown in ch. 7, a multiplicity of characters. (1) There is to begin with the perennial character which lasts through life. The child eats, so does the man, and so does the dotard. A number of processes accordingly remain faithful to us throughout life. Young or old, we are liable to heat and cold, hunger and thirst, comfort and discomfort. These and many more wants ever wait on us.

(2) As we pass through life, numerous fresh needs develop, reignt for a time, and then vanish, giving place to others. Their appearance and disappearance are universal phenomena, and should not be attributed to social influences. Shakespeare's sonnet form was a social product; but not his love for the "dark lady." The essence of the latter is older than man himself. With the periodic needs which come upon us, we now like to hear fairy tales and to play games; now we desire sport and tales of adventure; now love is the exclusive theme; now we are full of great plans; and now we long for rest and reflection.

(3) The above classes express what is universal in us, what makes us resemble our kind. Then follows the personal equation. No two things are alike in nature, and certainly human beings are not born as copies of each other. To that must be added that the conditions under which we develop always vary, and sometimes considerably, from which fact arises the difference between species, races, ages, classes, families and individuals. Each has its character, and because the conditions surrounding them vary, they vary with them, due allowance being made for heredity. The individual or personal character is that which differentiates a man from his fellows. What must be emphasised is that the most fundamental portion of individual character is determined early in life. If our intellect and morals are neglected in the first seven years, it is likely that we shall be lost to all high endeavour, unless very special circumstances modify the result. If we have remained uncultured—wavering in thought, while intolerant of ideals—until we are in the twenties, we shall be singular exceptions if we ever show any mental virility. Normally the first twenty years, often the first six years, straighten us or deform us. The exceptions to the rule are so inconsiderable that they are not worth taking account of in a general estimate. Thus the first fourth of a life of four-score years, perhaps the first eighth, is by far the most decisive as regards the significance of our efforts. We cannot leave to the matured
reason to select the best path we are to travel on; that path is already settled. There is then no room for anything but barren repentance, and gigantic labour ending in dwarfish achievement.

(4) To the list we will add, for the sake of completeness, omitting here peculiar and political needs (ch. 7), what we call our passing character. Frequently individuals show ephemeral traits. They are interested now in this thing, now in that. They are for a period bad-tempered, good-natured or retiring. Those traits which float like foam on the surface of a man’s being should be put in this category. These characteristics are not important.

214.—The Evolution of the Individual.

I have thus far dealt almost exclusively with what is more or less striking in the Sonnets, and I have neglected to inquire into the method of assimilating notions and applying them. I must now deal with that last point. A study of early childhood convinces us that men do not gather notions as they do nuts; for the notions are never separated, but organised and interdependent. They do not shoot up; they struggle into being. We cannot, therefore, embrace a truth as we might a child; or recognise it as we might our face in a brook. Truth has to take root in us, and only with the passage of years does it become part of us. That is as we should expect it to be, if we assume an organised psychological basis. Yet so simple are the facts of life that to illustrate the generation of notions, there is continual danger of having recourse to the familiar conceit of Minerva issuing fully armed from the head of Jove. On a transcendental presupposition that might be so: and the obscurity of psychic origins has undoubtedly given rise to a catastrophic conception which it nourishes.

The new-born babe, omitting potentialities, is much unlike fully armed Minerva. He possesses hardly anything except the sense of temperature and that of hunger. Nearly his whole life lies in these. Most of the time he lacks even that scanty outfit, being lapt in the arms of sleep.

With sight, smell, hearing and taste he is unacquainted. Not even a smile can be won from his lips. Slowly he begins to stare, as a preliminary to vision. It is some time before he recognises his nurse, and much longer before he welcomes other members of the household. Many months pass before there is more than a casual interest in the visual surroundings. The sense of hearing develops even more tardily, and accordingly for a long time he ignores sounds. Then he cries when the noise is deafening; then he hears without localising; then, at last, after many adventures, he turns to the point from which the acoustic waves proceed. The less important sense of smell develops much later. The child either disregards the scent of a rose, or merely pretends to an interest in smells.

For months, also, the child is unable to localise pain. Nothing in his behaviour tells the puzzled mother whether he is cold, or has inward
pains, or is choler ic, or is being irritated by a pin. All he does is to cry when some mishap befalls him. Such obstinate aci tur nity tries the patience, and puts to the proof the intelligence of his custodians. In relation to this we observe the noteworthy fact that his sensations are not connected with the place of their origin. He simply feels. He plays with his feet as if they were foreign to him. He has no sense of organic unity, still less a conception of it (sec. 19). The child’s reflection in the mirror is hailed as a baby companion.

With a softened stare, a sensibility to sound, a reference of pain to its source, a recognition of his body, comes the attempt at orderly movement and intelligible speech. However strange it appears, the writing of sonnets presupposes an uninteresting history of this nature, and one might say that it is as reasonable to expect horses to deliver sermons as to suppose that babes can write sonnets. Yet the story of the origin of Shakespeare’s poems begins with his birth. Consistently ignore these exploits of childhood and those that preceded manhood, and the sonnets might as well have been written by a statue as by a human being. The child was father to the man and to the sonnets. Without his early accumulations, the man Shakespeare would have been an idiot, possessing no powers of observation, discrimination, motion or speech, for these are the outcome of a complex nervous structure, built up by long training. Subtract what the child contributed to the sonnets, and they vanish out of sight; that is to say, all we do issues from our summed-up past. The organism which produces sonnets brings its whole life history to bear on the task.*

The man is rapidly being constructed. The child has an absorbing interest in motion. He moves about incessantly like a jackal in confinement. We almost hear his heart beating, and we see the consuming excitement in the face, as he makes a bold dash from chair to chair. Many are his falls, but still he perseveres, and uses no little ingenuity in his attempts to move about. After a year or two he can walk a little; but movement as a whole is yet in its first stages. The motions are still awkward and imperfect. Not till he has reached the twelfth year, and more, can he use his limbs with precision.

While still very young, about twelve months old, he begins to reason. Seeing the hand under the table, he identifies the owner; hearing a noise, he traces the source; he plays at bo-peep; and he snatches up quickly what he is afraid may be refused him. The vein of imitation is also very strong. Eager to act and reason, he freely repeats what interests him. Thus also he asks you to admire his dress, by pointing to it; or he pretends to smell the flowers.

Still, it is in connection with language that we find the richest growth of notions. Language is the golden key which opens to us the golden gates of knowledge. It is the sponge by means of which we absorb the thoughts of our fellows and the treasures of the past. With its help we come to

*The peculiar inattentiveness of infants and their lack of knowledge are to be explained, as in sec. 19, by the fact that all sensations are yet isolated.
make our own what it has taken generations of men thousands of years to accumulate.

Shakespeare's flowing sentences are not the outcome of the soul's spontaneity. They did not gush up from a mysterious well. Inspired as he felt sometimes, readily as the lines burst forth now and then, the inspiration and the readiness had nevertheless a protracted history. Their beginnings lay in the prophetic babbling of the infant, for as the violinist tunes his instrument, so the young child tries his vocal organs. For hours he enjoys to hear and feel himself gurgling, chirping and lisping—it is an earnest of what is to be accomplished a year or two afterwards. Where intelligent language commences, it is the tiniest possible rill, and the mighty river of conversation scarcely seems derivable from such a puny fountainhead. The splashing and sparking, the thunder and lightning, the music and wit, of the final product are as yet unsuspected. Slowly and painfully he learns and is taught homely words. Mamma, dadda, bupper, b(r)ead, byby, tata, salt, milk, upstairs, chair, nice, naughty, gi(ve) me, etc., are the peculiar sounds he sometimes favours. Perhaps at the end of the third year his vocabulary reaches to a few hundred words, though great variations exist in this respect among children.* These words can only be called words properly by courtesy. In the large majority of instances they represent the barest skeleton as compared to the massive body of notions which they convey to adults. Even such a word as "mother" signifies to the learner not a hundredth portion which it does to us. While the child admittedly uses a word, he cannot as yet be said to grasp it fully. Only after many years does he acquire a just conception of all that it implies. The child's vocabulary is, therefore, no reliable gauge of its acquirements. It will be long before his conception of the words resembles ours in fulness and precision. Adults absorb average thoughts easily, not because of occult powers but because the paltriest fraction only of the new thoughts falls outside their past. In so far as words are comparatively new, such as those which express philosophical conceptions, it takes us several years to understand them honestly. The readiness with which we enter into matters is solely owing to the stock we have stored. We easily react, because we react organically, and because our past has prepared us for nearly every emergency. The reason which comes with maturity is no deus ex machina, as writers like Lotze would have it; but is the result of protracted wrestling with the world, the beneficial results of which wrestling are observable in the adapted nervous mechanism. Other factors enter into the equation; but the one just mentioned is the decisive one. Thought is organised. Its capacity is a product of evolution. Reaction is far-reaching, swift and sure, because, through growth from birth onwards, the brain, and its coadjutors, have become perfected.

As the child grows, and learns through exercise, so the few hundred words change to perhaps 3000 or more. However, parts of speech, mixed haphazard, do not form a language, not at least the language of adult life. As,

* See on this point Preyer, *Die Seele des Kindes*, 1884, pp. 439-42.
therefore, his vocabulary increases, the child constructs, mostly by imitation, at first, broken sentences. "Gi(ve) me bupper, p(l)case," "I want this," "I want to go byby," "I like that," and similar word complexes are employed. At first the imitated sentences are short, crisp, incomplete and represent a speech. By degrees they become less and less imitations, and, at last, become longer and longer till they are similar to those of adults. Thus the language which it has taken untold centuries to form, is acquired through long practice by every human being. The phrase which we utter so glibly is the result of the functioning of an adapted organ. The words we use, the sentences we construct, the notions which underlie them, have each an unmistakable history. At the age of about ten, the child's speeches fairly well express his notions; but this stage of his development implies only a limited outlook. The wide, wide world is still a closed book to him. He listens to the conversations of his elders with wondering attention. Love, adventure, the family, business, politics, religion, hardly exist in his restricted purview. However, as he grows older, his vocabulary expands, the range of his conceptions widens and deepens, and the power of expression becomes sustained and visible. Then, maybe, he writes sonnets; but only when his past has provided him with skill, and supplied him with material, is such a task feasible. Even then he must have a quick ear for the subtle music of the metre. He reads till he becomes saturated with the spirit of poetry; he practises till he finds his wings ready for flight; nor does improvement end here. For years after his first successful attempts, his style ripens, showing a nearer approach to perfection.

There is a long distance to traverse from the crying infant to the writing of King Lear. The span cannot be jumped. The poet has to creep steadily upwards till he reaches the highest summits. From notions which are concrete and insignificant, he marches to world-embracing abstractions. From mediocrity he advances to unsurpassed skill. The thoughts ever broaden and deepen, and his power of manipulating them keeps step. On innumerable occasions improvements in his manner of thinking suggest themselves, and these he practises until the fluid fashion of thought crystallises into a trend.

We have pursued the history of the child's acquisition of language and thought; but it is not our business to follow his development into every nook and corner. We know how painfully slow is the progress in reading, writing, arithmetic, or other school subjects. Years pass before we read and write with any proficiency. Many a boy and girl who leave school early, and imperfectly equipped, read badly for the remainder of their lives, though they may be diligent readers. A twelve months' neglect revenges itself sometimes for the rest of a normal life. In every direction, we, therefore, observe how established aptitudes determine the nature of the mature man.

It has often been lamented that we have no sure means of rightly interpreting the child mind. The fact, however, has been overlooked that adults are children in very many respects, and that in this we have a valuable clue to the understanding of the passage from childhood to manhood.
215.—The Acquisition of Language.

In the preceding sections I have roughly sketched the general development of the individual. I must now examine in detail the method of thought as embodied in language. If organised reaction alone enables us to think and to speak freely and effectively, then it should be possible to discover how the web of speech is woven, and, accordingly, intelligent remarks, as they have a physiological aspect, and are due to development, should readily disclose their origin to the critical investigator. We ought to be able to show that the sentences betray in their composition the overruling presence of established trends. Every intelligible set of words must be hallmarked, if our point of view be correct. A sentence which cannot be accounted for organically, is inexplicable on our assumption. We can only deal with traceable complexes of a known order.

An average person speaks at the rate of about 160 words per minute when he is engaged in conversation, and, unless he is addressing an audience, scarcely any one is so slow of speech as to utter as few as 120 words during that time. On the other hand, 300 words per minute is no impossible speed. It would be interesting to know what is the exact number of words which an average person employs during an average day. Undoubtedly, as I had occasion to show in sec. 120b, thought is not infrequent in the absence of language; but we have as yet no experimental estimate to rely upon. We will assume, therefore—it is only an assumption—that the number of words used per minute is on the average sixty. This would give 3600 words an hour. Neglecting what speech there is in the dream state, we assume the waking hours to be fifteen. The words which are spoken, heard, read or thought of during the day would hence be 3600 times 15, or fifty-four thousand, or, in round numbers, fifty thousand. We will further assume that the vocabulary extends to three thousand six hundred words. If so, many of the more common words, as "and" or "of" must have been used more than fifty times during a day. Some of the remainder perhaps have occurred but once or twice. Considering the average number of words employed in the routine of life, we may almost suggest that a large proportion of them is used every day. [All these details are open to close observation, and must be determined experimentally.] Thus very many words have been, perhaps, repeated by us every day for years, so that the major portion of a man's vocabulary has been re-developed thousands of times during a life time. His familiarity with it is unquestionable, especially if we consider how short is the time that passes between the use of the same terms (sec. 164).

Words seldom occur by themselves. Assuming about ten of them to a sentence, we utter, read, hear or think about five thousand sentences every twenty-four hours. The construction of these we must discuss somewhat at length, for there is no definite list of sentences in any language, and their number has no limit. To enter into their nature, therefore, we must forsake the strictly statistical method, however interesting it might be to
know the frequency of repetition. Of course a child often says "I want a piece of cake, please," and we frequently say, "How do you do?" yet the quantity of complete sentences we repeatedly use is small compared to those employed occasionally. The repetition, we shall see, lies in the structural arrangement of the sentences, rather than in the sentences themselves. The method is that of cross-classification; that is to say, we vary the words in some well known way to suit special circumstances.

Given that the extent of variation is limited, so as to allow of constant reiteration, it becomes obvious that organised reaction will make us masters in the use of them. All that is required is that the multiplicity of forms shall be such as to allow of being assimilated organically.

This is precisely what we find to be the case. The overwhelming majority of constructions are exceedingly common. Hence, with years of practice, speech, uttered or unuttered, becomes fluent and intelligent. The mechanism is such that we readily predict this result. Examine the sentence: "Where is my brother?" I wished to speak to him; but he was not where I expected him to be. So I asked the above question. Presupposing that all was normal, my query arose out of curiosity. As soon as I saw some one who might be able to give me the information, the quoted words developed. I did not hesitate a moment. There was no perceptible building up of a structure. The words were well known to me; I was used to asking questions; and curiosity had often moved me. The only problem which remains, then, is to account for the sentence as such. The first word I had employed on many occasions in a similar way, viz., "where are you?" or "where has he placed the box?" That word would, therefore, on account of organised reaction, spring up at once when there was a question of whereabouts. The second one has been used even more frequently, viz., "Aunt Lucy is here," "Who is there?" "What is there?" However, not only have these two letters, is, found their way into similar constructions; they have many times been employed in the manner here illustrated. "Where-is" is a common form. Hence, on the recurrence of a similar occasion a similar phrase, such as "where-is," is re-integrated. What I remarked as to the first two words holds good of the third. It is often used like this: "What is my sister doing?" "My brother is here," etc. As with is, so with my. "Where-is-my," "What-is-my," "When-is-my," "It-is-my," are every-day expressions. Hence "Where-is-my" is re-produced as one phrase. If organised trends be a fact, this must be so. There will be no piecemeal elaboration where the necessity for it is wanting, and where a form is treasured up in the memory. And, lastly, the whole phrase is probably re-developed as it stands, because, like many others, it is often employed or heard, as "Where-is-my-brother?" We not only learn sentences by constructing them, but by coming across them in social intercourse or in books.

The stock of sentences or portions of sentences thus known amounts perhaps to scores of thousands, and, considering that the constructions are frequently employed, this sum is not extravagant. There is an almost
countless army of them. Glance at the following few lines which I drop
upon blindly, so as to exclude choice. "This is precisely what we find
to be the case. The overwhelming majority of constructions are exceed-
ingly common. Hence, with years of practice, speech, uttered or un-
uttered, becomes fluent and intelligent." None of these three sentences
can be safely looked upon as merely re-developed. The structure of the
first sentence is "This is precisely what we find to be the case," or "This
is precisely what we find to be the case." The thought being common, the
phrase is so also. The second will read "The overwhelming majority of
constructions are exceedingly common." In sentences like this last one,
words such as the fifth and the seventh often vary. This is true of many
adjectives, adverbs and other parts of speech. The choice lies usually in
three or four possible and known alternatives, and should their number be
large, it takes an appreciable time to select the appropriate one. The
third and last sentence is more difficult than the first two; but on the
whole, nevertheless, the analysis of the other sentences applies absolutely.
The construction is either common or there is special effort, or else an
appreciable period elapses before the sentence is completed. Thus it is
only natural that one who has had exceptional opportunities should have
fair command over his tongue or his pen, a large vocabulary and consider-
able facility in the manipulation of complicated sentences.

The contention for which I have been arguing is so generally true that
it would be tedious to push the examination farther. Fluency of language
can be without reservation accounted for organically. It is well within
the acknowledged powers of the human nervous system, and makes no
greater demand on need-determined re-development than can be satis-
factorily met.

Let us take one example of the elaboration of sentences implying much
thought. I ask some one what Casuistry is. After a little reflection he
replies "Casuistry is the art which deals with ethical difficulties." How
did these words fall together? At first sight the labour involved in com-
posing the answer appears fabulous; but it is not so as a matter of fact,
for it is evolved by organised trends. Being accustomed to the general
methods of definition, he at once starts with the word to be defined. In
all but exceptional instances that is undoubtedly the first word of the
answer. Given the noun singular, and the verb "is" follows as it has so
often done before. Similarly with the "the." We possess now "Casuistry-
is-the." Here he halts. Two words can only suggest themselves Art and
Science. A knowledge of the subject soon makes it clear that casuistry
has the features of an art and not those of a science, for the difference
between these two has often perplexed him till he has learned the distinc-
tion thoroughly. "Casuistry is the art," will, therefore, be uttered readily.
What immediately follows depends somewhat on the personal equation.
Probably most persons have sets of words which they employ on such
occasions. Instead of "which deals with," he might choose "that treats
of." His choice is limited and within that range organised reaction has
singed out one or two for use. Thus "Casuistry-is-the art which-deals-
with" should be fired off quickly enough. The final two words are, of
course, the most difficult to obtain. What happens here, is that by need-
satisfying reaction we re-member what is the most salient feature—the
phrase or set of words most often repeated. According to our knowledge
of the subject and our skill in definition, the answer emerges more or less
reluctantly. The notion of casuistry dealing with difficulties must have
often occurred to him, and there could be no doubt that the difficulties
were of an ethical nature. Thus the answer "Casuistry-is-the art which-
deals with ethical difficulties" is reached. The possibilities of error and
selection were moderate. He is not obliged to run hurriedly over a huge
array of words, for there is practically no choice. Perhaps on some
previous occasion he has read that "Chemistry is the science which deals
with . . ." Now he just places "Casuistry" where "Chemistry" stood,
and "art" for "science." Language, we see, is an acquired instrument.
This is soon proved negatively. A person who is not accustomed to
definition or to precise language, and has no knowledge of the subject,
will wander in thought. He will probably decline to attempt a definition,
and if he tries, there is little doubt that the result will be disappointing.
He must practically be in possession of the phrase if he is to be successful.
A definition is a form into which a special thought is thrown. A Member
of Parliament asking a supplementary question in the House of Commons;
a public man proposing a resolution; a solicitor preparing an affidavit; a
poet writing verse, offer illustrations of the same truth. Only he is ready
with words, who has the words ready. If we fail to propose a well worded
resolution at a public meeting it is not necessarily because we lack some
innate power; it is almost certainly because we have had no relevant training.

In agreement with the above we must never assume complexity, except
where we meet with intense and continued effort. When a man is asked
whether he knows French, we should not forthwith think that he is going
over all his work so as to give a satisfactory reply, for if that were so, we
should be bound to seek for a more subtle theory than the one here pro-
pounded. If reference to a campaign implied the total re-development in
a moment's time of all we ever knew of it, our present explanations would
miserably fail. The student of French, as a matter of fact, has most likely
been asked or has asked himself the question pretty frequently. He has
often compared his knowledge with that of the writer of his Grammars, or
with the fluency of Frenchmen. While acquiring the language, he has
again and again considered the question more or less deliberately. He
has perhaps been told that when he could read Victor Hugo's *Notre Dame*
with ease, and had mastered the grammar, he would then be a good French
scholar. His judgment is also called into requisition. He has had many
opportunities of deciding whether a thing is well known or not. The instance,
from a general standpoint, is a common one, and, again, where the student
is not prepared for the question, he either declines to answer or fails to
give a satisfactory reply.
Seemingly complex instances are to be dealt with as above. If in answer to a question I assert that a book is good, I do not review in thought all that I have read. To speak truly, I have probably forgotten most of the details. The impression grew on me as I read; I noted perhaps the uniformly fine style; or I re-integrated in reading more of what is valuable than I usually do with books of that class. Whatever the reasons, an immediate and accurate reply only results when there is nothing left to do but to polish a sentence.

The elaborate structure of language, with its enormous implications, is the result of slow and organised development.

216.—A Bird's Eye View.

Theoretically it might well be contended that most individuals differ from one another very considerably, while some immeasurably surpass the rest. Examination shows, however, that personal capacity mainly depends on the desire and the ability to absorb and elaborate the accumulated intellectual treasures of the environment, and that where little has been accumulated, genius of every kind is out of the question. We have also seen how the fundamental fact of equal incapacity is accounted for by the intricacy of truths, by the nature of organised reaction, and by the existence of changing needs. To these same factors the remarkable stability as well as the narrow range of individual character has been traced. Finally, I have pointed out the manner in which the infant develops into the man.
CHAPTER X

SYSTEMS AS CLASSIFIED

As our efforts rise or fall,
So our thoughts prove great or small.

217.—HIGHEST PRODUCTS.

We cannot account for a perennial spring, or for the mind, by asserting that it is its nature to pour forth, to create, a constant supply. The previous chapters have shown that the present, as a whole, is the organic outcome of the past; that our wisdom and our tendencies are as much an organic growth as the trees which pelt us in the autumn with their leaves. Recognising, therefore, that spontaneity is a myth, and that our psychic form and complexion is an intricately elaborated product, we at once ask the concrete question: "What is the known process which gives birth to high mental results in general, or, let us say, the last chapter in particular?" To answer, that the preceding chapter was not spontaneously evolved, but that it depended on organic developments, as shown in the portion of the work which went before, is not the explanation we are seeking. Following that principle, we should still be in the dark as to the concrete happenings when a problem of importance is solved. To put the matter plainly: Did I sit down at my desk, take pen and paper, and write off the chapter as readily as an organ-grinder turns the handle of his organ?

Our previous investigations have dealt either with general facts or with microscopic sections; but now we are considering concrete problems. The question asked at the conclusion of the last paragraph cannot be answered deductively, and we must, therefore, examine its precise implications. Many journalists are known to dictate lengthy articles with at least apparent composure and undoubted readiness; they neither stop to think nor to correct: they "go right on." Some novelists are said to write with the same ease and fluency. One author is thus supposed to have written a book, with the help of phonographs, shorthand clerks, etc., in about three days. In every such event ready-formed notions, convictions and practice contribute to the result. It would be surprising to hear that Plato's Republic or Spinoza's Ethics were holiday exercises, completed within a week or two; that Tennyson's In Memoriam or Virgil's Aeneid.
had been dictated, without preparation, to shorthand writers at the moderate speed of eighty words a minute, and published without correction. We know of no great book composed in this way. It is more common to hear of slowly-moving years spent in the making of a profound work. Leaving journalistic fluency unexamined here, let us consider our example, the last chapter.

When its theme suggested itself, I did not sit down and mechanically finish the chapter in so many hours of continuous labour. Perhaps a year before I began to write it, the notion of treating the topic occurred to me. Being most of my time otherwise engaged, I only thought of it occasionally. I noted facts scattered here and there. I now and then re-developed something relevant to its issues. I occupied myself casually with it sometimes for a few seconds, sometimes for a few minutes and sometimes for a quarter of an hour. As time advanced, more seconds and minutes and quarter-hours were given to the topic. Lastly, for about three months most of my leisure—often hours together, frequently stolen moments—was absorbed in understanding and framing the task. During that period my world was a magnet attracting whatever bore on my purpose. Everything suggested the problem of the Individual. It was the one thing to which the nervous system was specially alive. As we know, the very fact that I occupied myself almost exclusively with it gave the notion importance and momentum (sec. 111). It was this concentration upon it which obscured all other problems, which suppressed other lines of interconnection or reasoning, which made it the centre of the universe of interests, which enabled it to fill every pause between thought and thought, and which gave it the power spontaneously to present itself day and night.

Then came the actual composition. The pros and cons had been repeatedly weighed. This was omitted, this reinstated, this added, this corrected and that reviewed. With increased intimacy, came general conclusions of a more and more comprehensive order, and, at last, the various notions found their place in an all-embracing system. Writing proceeded now, with the help of notes and occasional re-examinations, pretty briskly, so many pages per day. Yet not a few difficulties required to be cleared up; many a sentence had to be re-shaped, and many a word discarded in favour of a more correct or expressive one. At the same time the concentration of thought was much more exhaustive than that observed in routine activity. Again and again I wandered off to side issues, or dwelt on chance objects in the environment, or entertained myself with idle fancies, or pondered over what I was writing. At last, the concluding word was reached. I then read the whole composition over again several times, correcting, adding, omitting and re-modelling. From this point my interest in the chapter gradually waned. Just occasionally I tapped its bars and wheels with the hammer of reason, and mended a flaw where I discovered one. The whole chapter was probably re-written—once, twice, who knows how many times—advantage being taken, of course, of the work already accomplished.
All writers do not adopt the same methods. Their end is reached by divergent ways. This, however, does not affect our position, for the point to be emphasised is that, for the purposes of psychology, an examination of a written essay conveys no notion of the many thoughts that were entertained by the essayist relative to his subject. Psychologically the exclusive examination of *The Origin of Species*, or the *Principia*, is an unwarrantable proceeding, for it yields us no insight into the concrete processes of psychology. The logician may examine your written reasoning, the lover of literature your style, and the moralist the ethical value of your contribution; but one who is interested in the concrete problems of psychology must regard books as one and only one of very many expressions of a man. He must take into account the general nature of intellectual growth, the method by which the individual has acquired skill in the use of his tools, and, lastly, the actual quantity of thinking connected with the final output. If we once consider the book by itself, and apart from the above factors, we are landed into formal psychology, which is nothing but formal fiction. Overlook the concrete building up, and you misstate the issue. I repeat, the workings of thought cannot be understood or deduced by examining their products in the last stage of development. It is to an abstract view, such as we are here condemning, that we owe the stringent divisions of the faculties, the conception of a pure reason, the notion of a self, the mind’s atomic mechanism and forces. Great attempts, using the expression in an elastic manner, must be thought of in relation to the process by which they evolved: allowance must be made in the first place for the acquired aptitude, and in the next, for the precise development of the particular book, picture or product generally.

A mechanical method of thought does not exist.

The highest class of thought, as we have seen, is not developed without much strenuousness. Sub-conscious thought, therefore, except in a very restricted sense, plays a small part in the life of the intellect. The factors to be considered in this respect are the following. We are positively dependent on others for almost our entire intellectual furniture (secs. 97 and 210), and consequently if we were left to ourselves, sub-conscious thought could not raise us much above the level of idiocy. As regards any capacities which the adult may possess, these are also impossible without the assumption of a development extending over many years. Sub-conscious thought accordingly has only minor significance; but it may be said to exist under certain circumstances, as when we are influenced by a partial withdrawal of the attention (sec. 19), by what is recent (sec. 110a), by the momentum of an act (sec. 110), by dim ideas (sec. 126), by a mood (sec. 110), by indirect suggestions (sec. 129), or by intimate knowledge (sec. 215). It may also be noticed when we are trying hard to re-collect, for strenuous thought is merely the cross-classification of memories (sec. 102). These factors, however, as also the existence of needs, have a conscious counterpart and are ever-present, and can, therefore, only lead to a theory of a conscious and a sub-conscious aspect of thought. The plain fact seems to be that there are no prolonged or complicated processes of thought taking place sub-consciously. Where, in sensation and thought, much remains partly undiscriminated, we have not a question of sub-consciousness, but one of not co-relating various facts, e.g., the muscular strain in the eye is only co-related with the guidance of eye movements.
218.—Deliberate Action, Speech and Thought.

There is, of course, no theoretical distinction between the concrete thought treated of in the preceding section, and that referred to here. We build up walls of separation for practical purposes alone, and we cut out sections from various parts of the thought continuum so as to obtain an intimate view of concrete thinking.

Let us consider an example. A master is telling his class a story from Daudet. Examining closely his words and sentences, we do not notice anything ambiguous in the expressions. The flow is so even that the tale would be readable if directly transferred to print. There has been but slight preparation. Probably notes were made, possibly not. Perhaps the story has been read more than once with a view to selecting the suitable portions. Except with an expert story-teller, some such preparation must precede the recital. Then comes the telling of the tale. The high quality of the account is no necessary reflex of the teller's concrete thought. Being a teacher, he watches his class while speaking. Finding himself not entirely absorbed in his narration, he now and again takes notice of various matters in his environment. Perhaps the noises from the street, his own voice, or the lights and shades playing round his pupils' lips, distract his attention on various occasions without breaking into his word-fence. Perhaps one listener seems much interested, a fact which gives him pleasure; while another, showing lack of interest, puzzles him. He may have felt annoyed with himself because he cannot tell the story as he would like. Such conditions as these are more than likely to be present.

While to all appearance the words are streaming forth with ease, the thought proper is not running so smooth a course. Something or other suggests irrelevant lines of thought which, though dismissed, continue to recur. Then, he often had to decide which of two courses to follow. Shall he leave this out, or insert that? Shall he point the moral of this or that incident? Will this prove amusing? What will be the effect of that? Not unfrequently he adds a sentence or two of mere padding to procure himself the necessary breathing space in which to arrive at some decision or to give a fresh turn to the story. Many a word is repeated or criticised. If, again, the master is a visualiser, he will, while talking, see many a scene in his mind's eye. Image after image will be developed; sound after sound, heard only by himself, will be detected. Then, too, he will feel what he is telling. Now he is slow and heavy, now quick and light, according as the story affects him. Suppressed imagery, thought and argument, both relevant and irrelevant, accompany his speech.

The master's attitude is that of deliberateness. Scarcely a word or a sentence is uttered, but passes the lips grudgingly. Everything is checked, as if custom-house officers were stationed there for the purpose. It is vigilance which raises the general quality of the recital, and increased effort along the whole line regulates the direction of word and thought. The
SPECIAL SYNTHESSES

slow speech which marks the man of deliberation, unaware though he may be of the fact, is owing to the turnstile click-click of anxiety which has become highly organised.

Though the story teller reflects the concrete state more faithfully as compared with the chapter we discussed in the last section, we have not yet obtained a photograph of human reaction. The telling of the tale suggests an order, a correctness, a facility, a directness, an even temper, an absence of effort, an unpreparedness, which are belied by the facts. Were we to engrave the sum total on an ideograph, if that were possible, how confusing it would be to the bystander, how different from the story as usually heard or read. Yet, as psychologists, it is precisely the sum total which we must be concerned with, if we are to avoid baseless conclusions. [Experimentally verify the above.]

219.—AVERAGE THOUGHT.

The less deliberate our actions are, the less amenable are they to inspection. The changes which the thought series undergoes from moment to moment are difficult to observe. When we suddenly turn our attention to the thoughts which have just passed, we, as a rule, fail to re-develop anything. [Is this so with you?] The bird of fancy is timid, and takes to flight when approached. Passing thoughts resent being focussed. We must, therefore, make our attention a very delicate instrument; our harking backward must be circumspect, so that we may observe without disappointment. We must be trained to veer round slowly, not violently; and abstract no more energy from the brain process than is absolutely necessary. [Note this.] Prolonged discipline will yield that ease and minimum of effort which alone enable us to do our detective work efficiently.

Let us examine an instance. One evening, after dark, I am walking along the road. Suddenly, in the quiet manner indicated, it occurs to me to retrace my thought movements, and I determine to start from the time when I passed certain bushes a minute ago. Standing under an electric street lamp I write down what happened. It runs as follows: “Looking at the bushes. It does look like candles. No, perhaps not; Oh! the resemblance is sufficient. ‘The candles of the Spring are lit.’ X. says about candles not being common—might be light, gas, or something—how would ‘candelabra of the Spring are lit’—are lit or are being lit. Is candelabra the best word? Does it convey the meaning? Perhaps it is the best word (63 words).” [Experiment in this direction.]

The bushes which I passed, and which I sometimes pass every day for weeks together, originally suggested the line quoted. The criticism referred to was made about eight hours before, and similar criticisms I had heard previously. Therefore, on seeing the bushes, I not infrequently think over the line. The first remark “It does look like candles” conveys no more than a percentage of the thought involved. The sight of the diminutive perpendicular sprays suggested to me innumerable tapers, standing upright. Probably that vision vaguely embraced memories difficult to localise.
Then, too, the sense of resemblance is a kind of wavering, with an inclination to one side—a rapid interchange of inarticulate Yea and Nay, with the emphasis on the Yeas. This state represents oscillations, proceeding at about the rate of eight or ten a second. What is true of the first sentence holds good of the others. The thoughts are gradually and forcibly developed. The doubts, the affirmations, the negations, the ponderings, were accompanied by a slight and yet sensible strain. There was an almost unceasing effort to think reasonably, so as not to be led away by irrelevant suggestions from the environment and otherwise. The feeling which is specially noticed with heightened exertion was almost constant. Numerically speaking, therefore, about thirty efforts were made in the minute which passed; and yet the minute’s thought looks very much like an average of mental process. Still, the examination yields further material. Not being engrossed in the train of thought, I must have heard much noise, seen many things, and felt not a little. When intensely in earnest hardly anything is heard, seen or felt; but ordinarily the environment and the bodily organs distinctly affect us. Being engaged in thought, the sounds are not classified: the noise of wheels, the jolting of cars, the tramping of horses, the cries of vendors, and other sounds, are not considered in connection with a context. They are sounds and nothing else. The jolting no more suggests the sight of a van than it does the notion of the evolution of vehicular traffic in relation to civilisation. We distinguish a familiar sound, and there are no thoughts whatever connected with what is heard. We trace no notion of familiarity, of time, of space, of form, of part and whole, or of like or dislike. All these are so many additional notions of which we are not necessarily aware. In the normal state there is always some detail connected with what is heard. As our thought absorbs more attention, so the sound of the car is gradually reduced to a vague featureless sound which finally ceases to impress us as a sound at all. So is it also with sight and other systems. We must not imagine, therefore, that life is crowded with vast thought complexes, for what happens from moment to moment is analysable. It is not necessary to maintain that we face a gigantic complex when we say: “The candles of the Spring are being lit.” No image of a candle developed at that time. It is hardly necessary to say that the heat, the feel, the physical and chemical nature, and the history of candles and their relation to other things, were not before me. As we learnt in sec. 215, the swiftness and the discrimination with which we utter a sentence, bear witness that it was not spontaneously created. Making this allowance, we assert, that, from the point of view of the feelings, an uttered sentence is best thought of as a nervous product, the precise manner of production being yet unknown. The assumption of vague depths of feeling into which the simple words send their many roots, is unwarrantable. Compared to the nervous system, feelings are extremely simple, and that which they contain can be analysed almost exhaustively by a careful experimentalist.

It is necessarily very difficult perhaps impossible, to re-develop even five
minutes' thought in undoubted completeness, and it is questionable whether the sum total of one minute's systems can be re-integrated; but even if that be so, we need by no means despair. We may overcome the obstacle by taking a large number of observations at random, comparing them, and seeing whether the result is compatible with the rest of our knowledge. There is still another alternative. It is probable that exceptional persons may so train themselves as to follow the play of thought in its entirety for some seconds. With the attention shedding its light on the facts, they will be more easily and more faithfully re-produced, and after a few seconds—say ten—recorded. *For a fuller account of the workings of thought such comprehensive search is sadly required. [The enthusiastic student should come to the rescue.] We could then tell better what it is exactly that occupies us normally. In principle, attending to the object of our attention is comparatively easy. It only becomes difficult when we insist on observing everything without exception in a section of thought.*

We have analysed one example, and for general purposes and in view of the limitations of space that must suffice. We have noted the incompleteness of language, thought and imagery, and we know consequently that a striking contrast exists between normal reflection and the written expression of the highest thought. Strenuous effort is absent in the former case, where the thoughts flow freely. In the latter case, on the other hand, we, like Alpine climbers, advance cautiously.

Thought is frequently wordless. [Is this so with you?] For example, I am thinking of a certain person and note the following images. I see him sitting in a certain room; then standing; then talking; then walking; then being introduced; then in some other place on various well defined occasions and in a variety of postures. Then I re-develop his house and scenes therein; persons he is acquainted with, and the like (sec 120b).

It must be noted that there is no connection virtually or in time between image and image, nor are they related internally by similarity; the need alone rules the series. The contiguous and the similar, in the ordinary sense, are excluded. This class of thought is by far the quickest. With me, at least, two-thirds of a second, would be a maximum average for the development of each picture [and with you?]; while what is thoroughly familiar and serially related, like shops in a street, may require less than one-tenth of a second for each picture. [Test this.] These images, again, are not usually complete. We obtain just a hint, a faint sketch, of what interests us.

What is true of visual thought, is true generally. [Is it?] According to occasion and idiosyncrasy thought is more or less broken, more or less like a mosaic the various colours of which are supplied by the various senses. As we saw in the illustration which we specially analysed, feeling plays an important part when we investigate the smallest particles of thought.

The examples quoted in connection with these three sections must be

* The more familiar a passage of thought is the more easily can it be observed or re-developed in completeness.
taken to be selections from a large stock. For adequate exposition twenty or thirty pages of illustrations would scarcely have been sufficient, and those chosen should, therefore, be regarded as typical rather than exhaustive. We see, then, that strain and completeness are a sign of highly developed thought. The vocabulary, the sentences, the similes, the logical exactitude, the appearance of system, all prove this. On the contrary, in our normal private meditations, laxity and incompleteness are the rule. A single feeling, a solitary image, will in this case stand for what could only be expressed by sheets of paper and repeated reflections. As we have observed, ideal thought as embodied in men's best work, is not an even outpouring. It implies long preparation and careful correction. By parity of reasoning, therefore, we recognise that sections of normal ideation will, on the whole, lack originality and system. Similar stimuli make us dwell over and over again on the same subjects, or else we merely give a passing thought to whatever our environment presents us with. This is the more natural as, according to sec. 134, constant reiteration alone enables us to preserve our multifarious acquisitions. Were we not readily to attend to them, they would drop out of the memory. Besides, great strain being excluded as a constant, what has happened recently, combined with established and superficial interests, holds us enchained. So also with the absence of system and completeness; while the normal strain is too petty for them, the struggle for existence among the units of thought and action imposes a time limit to every thought.

226.—Afferent Activity.*

We reached, in the last section, the domain of psychological thinking. Before we proceed to examine lower orders of combinations, we will investigate a few fundamental questions.

I sit in a chair in which head, limbs and body are easily rested. [Repeat.] I remain immovable for a while, thereby making sure that only a minimum of intra-organic and extra-organic incidents are registered. The fixed eyes in the motionless head soon exhaust what faces them (ch. 2), since the position permits no variety of visual information. The outside world is only nominally represented, and my thoughts are not occupied with external objects. Imagine now that I am thinking of the tenets of a certain school of philosophy. At some point comes a dilemma; for a moment thought is suspended, knit the brows, and continue to think. I wish a little later to understand a knotty problem; but, being baffled, there is another blind stare—this time without effect. Ordinarily, under such circumstances, we clutch at some afferent or inflowing modification, regain our equilibrium in this way, and re-commence our search for a solution; but afferent or incoming activity is excluded by consent. Assuming that I keep my fixed position with perfect steadiness, the result will be that I become sleepy or self-hypnotised. [Test this.] The stream of

thought, like any stream, requires constant feeding, if it is not to cease. It will not move of itself; it has to be perennially stimulated from without. Why that is, the physiologist must answer. We only know that, when a train of thought is interrupted by an insurmountable obstacle, thinking tends to stop unless the body is thrown into agitation or the senses fill the gap. When, therefore, the stream of thought has ceased to flow on account of the supply being stopped, it becomes, as we should expect, a dry river bed. This, however, is not all, for we also desire to know whether pure thinking, which so soon lapses into inanity when not stimulated from without, will start of itself. The above contention shows that the contrary is the case. The current of thought is not only maintained by afferent activity, but is set going by it in the first instance. [Observe.] Once we are asleep we should very likely never wake again, unless we were afferently roused. Thought, therefore, is only possible when we are in unceasing contact with our environment, and afferent impulses, therefore, must be regarded as an indispensable condition of the thinking process. In their absence, functioning is impossible. Thought does not keep itself alive by a force which dwells within. Its fires are fed by the senses. No senses, no thought. [Is that so?]

We excluded in this experiment the more obvious bodily motions. To be strict, we ought to discourage all movement, palpable or not. We should, therefore, refrain from knitting our brows, setting our teeth, fixing our eyes, or increasing in any way the susceptibility of the senses. To act as suggested is to shun effort; and, since inner effort is nearly a constant, thought, but for neural tone, will be suspended almost immediately when we become perfectly still. [Test this] Special training is required in order to accomplish our object with ease, while under certain circumstances we shall be more successful. An illustration of the first category is to be found in those individuals who have been repeatedly hypnotised; of the second, in the state of the body before sleep. In the latter case, it is the fact with many that they are no sooner still than sleep supervenes. [Observe.]

From the general premiss it follows that a life is not complete unless it has allotted to it a proper share of afferent activity. In ch. 9 we already saw that the bulk of leading notions are taken from the environment, and that the individual, at his best, can add but a mite to the general store. Thought is, therefore, doubly dependent on the atmosphere from which it derives its nourishment.

Some interesting facts can be brought forward in illustration. Many have been the harrowing pictures drawn of the horrors of solitary confinement. Men break down physically and otherwise under the treatment, and it is touching to read the stories told in this connection. A prisoner makes friends with a young rat. He tames it; he brings it up; he shares with it his food and drink; and he plays with it. When his comrade is discovered, he, with tears in his eyes, begs for permission to keep it. Though he is otherwise obstinate, the threat to remove his companion brings him to sub-
mission. Why has solitary confinement such strange consequences? I answer, because the nervous system is too much left to its own resources. Why, again, is a rat which is petted, or a strip of soil which is cultivated, so great a blessing? We reply, because they yield constant food to the attention. Often when a thought haunts us, external occupation drives it away, and hence new views keep our old ones sweet by preventing monotonous repetition. Manifold interests remove over-attention, while regular work relieves the strain of abstract thought. In the absence of liberty, therefore, we pine. Give the thinker paper and ink, and his cell becomes for a time his study. He exercises his brain and plies his pen. He keeps himself sound by exploiting past afferent or ingoing impressions. Yet since memories lapse unless frequently re-instated, and since the environment of a prisoner is too restricted to suggest much, the stores will shrink and the thoughts will wander.

Similar conditions give rise to similar results. Those who live in the country and do not interest themselves in nature, affairs or books, are in a position resembling that of the prisoner. To them town with its afferent attractions, the theatre, the concert, the visit, the street bustle,—is something to be desired. Were they to take a living interest in nature, their organic wants would be satisfied; so also would they be, if village politics, or sports or books appealed to them. The dulness of the country only makes itself felt in those to whom nature's happenings are a manuscript where the writing is blurred. In any case, the conditions of content or discontent are the same, and travel, therefore, owes its fascination to the wealth of afferent charms which it yields.

The monotony which is produced by division of labour needs only to be mentioned for us to recognise therein the lack of a variety of outer influences. The recurrent actions, claiming very little attention and that in one direction only, tiring because of their persistency, and supplying little or no new material to the nervous system as a whole, do not satisfy the normal cravings, and hence a general mental torpor ensues. Not being permitted to fall asleep, the labourer sinks to a lower level of being.

[Observe the effects of monotony.]

For this reason the child who is constitutionally eager for facts because its outlook is yet very limited, throws away its doll and hugs a piece of wood, or neglects the clockwork mouse with its monotonously repeated movements, and takes to playing with live cats and dogs. The child requires a ceaseless stream of fresh information, and naturally tires of an object such as a toy animal which is for ever feebly nodding its head. Sand, therefore, is the child's ideal companion. [Watch children at play.]

All forms of art and sport satisfy primarily because they occupy the attention. As the next chapter will be devoted to proving this, we may close the subject of afferent activity.

* Dugal Stewart (Elements, 1808, pp. 328-9) already saw a portion of the truth contended for in this section. He holds, for example, that relaxation of the attention, ceasing to act and think, and listening to monotonous sounds, induce sleep. The dependence of
As attention implies direction of activity, so sensory or afferent attention implies sense activity to a certain extent. In seeing, for instance, the ocular mechanism is at work, and the visual results will accord with the line of its activity. So with all the senses, and also with efferent and central activity. Attention in every case argues some bodily movement or adjustment. As Much says: "It seems to me a very plausible contention that the attention is quite generally traceable to the mechanism of the body. If nervous work is proceeding along certain lines, then the nature of the mechanism bars work along other lines. And what holds of sensory impressions, probably holds of thought. Thinking may be regarded as change in attention" (Zur Theorie des Gehororgan, 1865, vol. 48, part 2, p. 297). Consequently we shall understand the nature of attention when the bodily mechanism is well known; but meanwhile there can be no doubt as to the quantity of attention being rigorously defined. Of the physiological side another factor in attention is readily explained. In the normal waking state the organism is always braced up, alert, ready to react, prepared for making an effort, and the same holds good of the attention under the same circumstances, to a similar extent, and presumably for the same reasons. We have to consider, therefore, not only the direction but also the tone of attention. As the tone is marked, so successful efforts of attention are assured, while absence of a high attentional tone will mean painful effort and insignificant results. This is obvious when we observe that in sensing and in thinking muscular strain is an essential [Experiment], and that accordingly a low tone of the muscular system generally means also a low attentional tone. For the same reason, too, the field of thought and memory, both as regards extent and rate of change, will be the same in almost every respect with the field of observation, and that because the same factors are involved in both fields (sec. 120). Lastly, just as every activity implies a modicum of tone, so also in attention strain or tone is an essential factor.

221.—Eff ecent Activity.

While employing such terms as afferent and efferent, or incoming and outgoing, it must be distinctly understood that these processes do not exclude central nervous influences, for sensibility is the result both of central and afferent activity. Images are never presented to us, for the images are part of us. In every instance the waves of light or sound are only some of the conditions necessary to sight and hearing. Thus, when we speak of afferent or efferent activity, it must be understood that central activity is one of the factors in every reaction.

Efferent or motor action does but subserve afferent or sensory action, and is really a help to it. To content ourselves with watching what happens and hearing of what takes place, keeps us beggarly in intellect, for speculation can tell us so little that we cannot trust to it for our supplies. To overcome these hindrances we actively interfere with the process of the suns. For instance, we attend a lecture on Chemistry, and are told what to do in the laboratory. We see with our own eyes how the lecturer manipulates the substances, and then we experiment ourselves. We are astonished how often we fail; how inordinately long each experiment lasts; but as time goes on, laboratory work becomes easy. It is difficult, there-
fore, to conceive the tons of information which would be an adequate substitute for ounces of practice, while in addition there are personal problems which others cannot solve for us.

In afferent activity there is always efferent action, as in the adjustment of the eyes, the head, the body and the limbs. Without such movements we should notice almost nothing. [Verify this.] In complex motions, such as are implicit in experiments, in travels, in protracted observations, in work, we meet the conditions most favourable to afferent activity. Thus the child’s playing with the sand on the sea-shore gives him the widest scope as regards afferent possibilities. Looking at a heap of sand he learns hardly anything; playing with it, he receives a wealth of information. Efferency and afferency are thus complementary, at least so far as continued sanity is concerned. Both together yield the ideal result.

The system of motion which is expressed in efferency of itself demands exercise. Not to employ the muscles is to allow them to deteriorate, and that, in its turn, makes physical activity on a larger scale difficult while it originates diseases which affect our vigour. Work, in the widest sense, is hence one of the prime necessities of our being. Not to work, is to cease to exist, even if we do not take central nervous activity into consideration.

Afferency is essential, and since efferency is one with it in purpose, the one becomes as necessary as the other. The existence of needs alone is more fundamental in that it conditions both sets of actions by supplying a constant and uniform momentum. [Study the motor factor in observation.]

222.—Central Activity.

We saw, in sec. 219, how, in random thought, we are occupied in observing and passing in review what has previously been a centre of attention. We also insisted in the last section that reaction is always partly central. This last point should be deliberately recognised. We must not allow for a moment that because very little attention is employed in vision, therefore a visual system is an “impression” or a “presentation” in the literal sense of the word. If this be clear, the next stage is to recognise the place of deliberation or endeavour. We have seen how little effort is expended in average thinking as compared with the highest classes of thought, and how, since sensible effort is almost synonymous with deliberation, such effort may be regarded as an essential of vigorous thinking. When we consider that firm endeavour transforms what is normally fickle, haphazard and wilful, into something with at least the semblance of strenuousness and system, we may concede that afferency and efferency are but a part of a greater whole.

Well directed effort is an indispensable condition of strength. We are not warranted in assuming that there is a single human being who forthwith, or with perfect ease, understands every problem which crosses his track. Pausing over difficulties, keeping them deliberately before us, alone tightens our grip. We cannot learn to do by seeing alone; we must practise. So, also, undigested observation can never raise us to a high intellectual level.
It is melancholy to observe rational creatures absorbed week after week in magazines and reviews, day after day in political events, and hour after hour in questions of conduct, and this for a life time, without appreciable growth of insight. A few years' honest work to start with, or a little occasional hard reading and hard thinking, would have immeasurably increased the value of their reflections. As it is, their notions are ever performing some fantastic war dance. The wings of their thought have no power nor skill. They are tossed about helplessly like a dead insect in a gale.

The highest forms of thought imply that primary and secondary systems are ceaselessly ordered and re-ordered; that we constantly have recourse to effort in order to give our thought true sequence and method. Superficial reading of books, magazines, and papers; attending lectures of a so-called popular character, travelling, or going into society, will have scarcely any effect in raising the quality of thought. Training or deliberate exercise alone fits men to rise in the scale of existence. [Is that so?] Affectional, effervent and central activity must be combined to give thought its maximum value. We need hardly repeat that these three are one in any combination. [Test the central factor.]

223.—“Twixt Waking and Sleeping.”

Thus far I have maintained that impressions, presentations and perceptions are unrealities if we abstract central activity. We will now investigate experimentally the extent of our power to mould the primary and secondary material.

Most persons are able to discern faces in the smoke-stains on ceilings, the veining on doors, or the designs in wall-papers. [Are you?] Starting from this minimum I attempt to see faces. Wherever irregular lines exist, and there are a few places where they do not, the human countenance appears. The clouds which had previously suggested steam, masses of snow, or mountain ranges, teem now with living outlines. Everywhere without exception, after a few months’ practice, I discern known and unknown features. At last, it requires special effort to avoid the annoyance produced by these arbitrary shapes. [Repeat the experiment.]

To make my investigation a little less tiresome I briefly experiment with the clouds, since these do not often claim the attention. No longer satisfied with building up human faces, I come to integrate full-sized human beings, lions, tigers and other animals, both in part and as a whole. To the menagerie I add specimens from the vegetable kingdom, from art and from inorganic nature. Later, I see the forms in any proportion I please.

I endeavour now to transform one shape into another. Where I see a lion, for instance, I develop successively object after object that I am bent on imagining. I continue experimenting till I am confirmed in my success.

Lastly, I attempt to construct figures from a minimum of outlines. With nothing but a straight line before me, I can only construct a serpent, a
SYST\(E\)MS AS CLASSIFIED

reed or some similar object, and I cannot see the straight line as a circle or a square cabinet. With an uneven line a variety of images can be constructed. Three points, with an indifferent background, allow considerable scope to the imagination; but always within the limits of the outlines. In no case do we find images to which there are no corresponding outlines. Similarly, the colours we observe are those of the object, and flat outlines yield at first two-dimensional forms.

We conclude, then, that the imagination when turned outwards, freely creates forms, which are bound by the given figures, their colour and their flatness. [Test this.]

Looking at these experiments in the light of the second chapter it becomes manifest that they illustrate a general principle. All pre-developing and re-developing is primarily imaginative or neural. The lion's head which I see in the clouds, is formed by me neurally exactly as is the so-called real lion which I may have seen in the desert. In both cases we pick out the features which we choose to dwell on; and in both cases the object is equally real or unreal. The differences are practical and not-theoretical. They are determined by social agreement, by the desire for the satisfaction of needs, and, in part, by hereditary predilections. The brain's activity is essentially like that of the sculptor's. Its works, like his, are without exception, art-products.

When Spitta (Schlaf- und Traumzustände, 1882, p. 87) says that "in our dreams, as in matters of temperament, we each dwell in our own world," he is correct so far as social conventions, strengthened by hereditary tendencies, are concerned, though it is as true to say that each lives in his own world whilst awake. Sjöö (Manual, 1899, p. 318) agrees with our position, holding that "in general, whatever appears to the perceptual consciousness as separate is so because it is a centre of practical interest."

I might even go farther. A little effort would soon enable me to transform solid objects into solid shapes, and I might also succeed in giving body to two-dimensioned outlines. I could, finally, by the same rules, see the imaginary objects in motion. My experiments are few in that direction because of the danger to sanity. I observe just sufficient to make sure of the possibility and, indeed, we can deduce these steps from our premises without going to the data. However, it is so important to preserve a normal grasp of facts that nothing but very serious considerations should persuade a man to indulge freely in such activity.

We now experiment with eyes shut. One would think that closing the eyelids produces the "darkness which the blind do see" (Shakespeare, Sonnet 27); but an appeal to the facts soon convinces us of Shakespeare's error. Looking straight before us, when our eyes are shut, we observe various things according to the light surrounding us. With the summer sun shining on the face, we observe a rose-coloured ocean of fire in violent agitation. [Test.] The colours change with changes in our activity. If we, under the above circumstances, pass a hand over the eyes, the flaming field of sight becomes comparatively dark, and when the light is entirely excluded, we note only a dark screen with lighter points and lines,
reminding us of a woven sheet.* Turning our closed eyes upwards, downwards or sideways the field of view changes [Test.] and with changed conditions the colours vary indefinitely. Hence up, down, right, left, may have a meaning for us eyes with eyes closed. [Test.] Looking at the sun for a moment and then closing the eyes, we observe sometimes, especially when tired, a number of tiny suns which pass through a series of beautiful colours. [Test.] The dark field is of the same texture as the void which we see in a very dark place with our eyes open; for instance, in looking into a box at night or passing through a long railway tunnel. [Test.] Only when one eye is closed is there total absence of vision in that part. [Test.]

If, then, outlines are available, experimental figures will be possible. I try, therefore, to construct definite objects in the retinal or closed-eye field of vision. This experiment is more easily described than carried out. The whole of my energy is often wasted in preventing the eyelids from opening. Frequently, again, I find myself dozing off in the attempt. Sometimes, also, imagination pure and simple is mistaken for observation.

If we, however, look upon these difficulties as overcome, we then encounter the last and greatest obstacle. The outlines are sometimes overwhelming in quantity, and are seemingly on the move without ceasing. Success here is most difficult, and it is only now and then that, after much effort, we develop objects suggested by our fancy. There are, however, three points to notice, namely the field of vision appears to have volume, colour and movement. [Test.] If, therefore, we fully succeed, we shall be able to obtain a close imitation of reality, the imagination possessing here an ideally plastic material for its purposes.

In the normal waking state these experiments have remained disappointing. Some shape or other is formed on occasion, and this is sufficient to prove our contention; but these shapes usually lack liveliness. We, therefore, watch ourselves going to sleep. We find that as we withdraw from the outer world, the imagination is for a while arrested by the closed-eye field of vision. [Repeat the experiments.] Perhaps I awake fifteen times or more in a forty minutes’ afternoon experiment. On each of these occasions arbitrary figures and scenes are, as it were, created; but only a few can be re-developed after I wake, although I have pencil and open note book lying close by me. The pictures are seen abruptly, and at the moment where we usually plunge into sleep proper. Now it is a cow running through a wood, or men-of-war at sea, or a bedstead, or a well, or a curious bird flying, or a rocky shore, and the like. Around the sight grows up a story, and that, with the picture and other systems, is the dream. The more we study these phantasms, the more evident does it become that they are painted on the canvas of the dark field. When once we have fixed them in the memory, they are re-producible in perfection. They exhibit the features which dreams possess. Their externality and likeness to life are the direct result of the impress of the imagination on

* Fechner speaks in this connection of light-dust.
the plastic, occasionally coloured, and three-dimensional mass. Yet on occasion, when exceptionally fortunate or after long training, we may obtain complete experimental proof, for in the transition between waking and sleeping we can sometimes remain fully alert, studying and shifting the images at will. Thus I see a forest, which changes into a view of the roofs and spires of a town, which becomes again a large human crowd, and so on. [Test] In such instances we observe the oneness of waking and non-waking closed-eye images.

Goethe had already referred to these phantasms. Gruithuisen has vague allusions to our subject in his Beyträge, 1812, pp. 58-61, and pp. 362-72. Johannes Müller (Über die phantastischen Gesichtsercheinungen, 1826) made an exhaustive study of the subject, which has not yet been equalled. He describes the phantasms in detail (p. 21). He can see them in the day-time when he shuts his eyes and becomes absorbed (p. 21). The will cannot produce them arbitrarily in normal cases (p. 23). Our dream-pictures are but a continuation of slumber pictures (p. 24). The latter mostly appear suddenly, and are one with the blot of light (pp. 29-30). “Dream-pictures are nothing but the luminous phantasms which, before falling asleep, are to be seen when the eyes are closed” (p. 49). In these states we can see things which we have never seen in the outer world nor shall ever see there (p. 100). Müller consistently and suggestively extends his application to the other senses, and to such phenomena as witchcraft, hypnotism, somnambulism, spiritualism and insanity. Burdach (Physiologie, iii, sec. ed., 1838) keeps close to Müller. He speaks of the slumber pictures as being the “elements of dream-life,” and says that they are at first not regarded as real objects and that they form an introduction to dreams (§ 600). Maury (Le Sommeil et les rêves, 1865) closely follows Burdach who followed Müller, adding nothing that is new. He, too, agrees that “hypnagogic hallucinations constitute the formative element in dreams” (p. 53); that at first we are not deceived (p. 53); and that the hallucinations are not restricted to the sense of sight (p. 54). From Maury’s time up to the present little has been done save to quote him. I must, however, except an excellent note on visual dreams by Ladd (in Mind, 1892, pp. 299-304). The experimental method which is advocated in this work is successfully applied by him. He says “Almost without exception, when I am able to recite the visual images of my dream and to observe the character of the retinal field quickly enough to compare the two, the schemata of the luminous and coloured retinal phantasmals afford the undoubted clue to the origin of the things just seen in my dream-life,” and he also tells us that during the first hour or two of sleep, the relative sensitiveness of the soul to all intra-organic changes is greatly increased” (p. 301). In another place, Ladd (Direct Control of the Retinal Field, 1894) refers to deliberate and successful attempts to build up chosen pictures. Greenwood (Imagination in Dreams, 1894) considers that the slumber pictures are entirely independent of the will (p. 22); that they only consist of human faces (p. 24); and that they are independent of the memory (p. 18). As with so many writers on the subject, scarcely one of his contentions has general value. The very contrary of each one of his assertions as regards the originality, vividness and independence of slumber pictures, can be proved experimentally. See also Dearborn, A Study of Imagination, 1898.

Let me record another experiment. In going to sleep I, for experimental purposes, repeatedly and deliberately open my eyes. [Repeat.] I detect a peculiar tendency of physical outlines to weave themselves into a pattern. White objects, such as a piece of paper, seem phosphorescent.

*Herbert (Lehrbuch, 1816, p. 29) says that no one can observe himself falling asleep; and Cox (Sleep and Dream, 1878, p. 8) observes that “the passage from waking to sleeping is momentary.” We have, on the contrary, seen reason to think that the passage is observable, and that the process is not momentary.
in their brightness; and an article of clothing close by appears as a patch of light on the wall, twelve feet beyond. The dimness alone does not account for what happens, because when wide awake and sitting in the dark, I have never suspected these vagaries of the imagination. So, again, waking in the morning I am wondering who has placed a strange brush on the table when the vision resolves itself into two books. Again, on another occasion, I imagine I see two of my manuscript books, when in the morning I discover I had mistaken a brush for them. Rousing myself repeatedly before going to sleep, or in the morning, I become accustomed to see semi-visions. Now I seem to see this person, and then that one. In the earlier experiments the illusion was never complete, except in one instance where the delight of facing a real phantasm roused me completely and dispelled the vision. But in every instance—I am speaking of what happened nearly every day for weeks—there were elements of a human figure so distinct that they could be traced in detail. On another occasion I discovered a Rembrandtesque figure. I saw the Rembrandt hat, the ruff, the coat, and the arm hanging down by the side. Each time I looked, the appearance was so distinct that it was difficult to see the objects in their normal guise. It takes some time to rid oneself of the phantasmal presence.

Here is a satisfactory case transcribed from my note book. "Early this morning I woke. I gather that I was not fully awake, since it was not easy to keep my eyes completely open. I saw in the room a nurse. I, then, experimentally imagined details of the figure. There was her dark cap, her eyes, her face, her ears, the hat ribbon, the neck, the cloak, and the girdle round her waist. In fact I was able to add any detail I pleased. The figure was lifelike; the facial expression pleasant. For a little while I also saw a woman, drawn on a two-thirds scale or less, and standing higher than the nurse, seemingly doing something to the latter's head-dress. It is surprising out of what unpromising material the nurse was formed, some clothes being the basis of the first figure. I think that the white lining of a waistcoat suggested the face of a nurse, and that I then selected the outlines, at first dreamily and afterwards with deliberation. I seemed to proceed as freely with my material as the potter with his clay. When I rose in the morning I could trace everything. The phantasm of the other figure was formed out of several objects on the mantel-piece about ten feet away, thus producing a complete illusion of distance. Just before rising, about 7 a.m., I had another hallucination, a very striking one. I saw the head of a warrior, cut as in adamant. He seemed to wear a low cap-like helmet. Underneath I saw his eyes and his eye-brows. He had a long straight nose, suggesting great power, a small protruding clean-cut mouth, and an incisive chin. The face looked massive and strong. I believe I was not clear whether it was a face itself or the vistor over it. I believe I was inclined to the latter view. On closely examining the groundwork, the nose appeared too long. It was probably that which suggested the vistor. Curiously enough the fawn-coloured material out of which the head was formed ap-
peared verdigris in colour, which may have been suggested by the thought of a visor, or vice versa. When I rose a little later, the apparition was still there.” The “nurse” hallucination decides once for all the essential oneness of the open-eyed and close-eyed hallucinations of the period between sleeping and waking.

In the peculiar condition when closed-eye phantasms are normal, appearances of an abnormal character can also be witnessed, as we see, with the eyes open. The imagination, having become weak and wilful, follows only minor suggestions, and adapts everything to its own secret machinations. What we distinctly note once more is that these imaginations, however startling, are hewn out of the solid rock of primary systems. The outlines which appear, are not imaginary; they are real. The colour and the depth, too, are objective. With a little training it is not impossible to form three-dimensional shapes of every kind as freely as, when in dealing with clouds, we create two-dimensional ones.

Apart from experiment it is exceptional for people to wake when the conditions favour hallucinations. Hence many persons are not aware of ever having encountered even a single illusion of this nature. Others, again, hallucinated when some organic stimulus wakes them in the midst of a dream or otherwise, or when some hope or danger, or the knowledge of a near death, for instance, disturbs the neural equilibrium. Naturally, the images vary with acquired tendencies. Children frequently see grotesque figures; and so do savages. Custom and religion serve also as interpreters. “We have a Greek who sees the shade of a drowned mariner mourning that he cannot cross the river Styx till his body is buried; or the phantom of an unbaptised child who bewails the misery of its suffering from having died before the rite necessary to salvation; or a Mussulman who sees in the jungles, or the desert, the green mantle of the Imam Ali mounted on his charger; or a Hindoo ghost who complains that low caste men have polluted his tomb” (Ireland, in Tuke’s *Dictionary of Psychological Medicine*, 1892, ii, p. 1359, article “Visionary”). As with the quality of the apparitions, so with the quantity. When conditions favour them, we have, as we should expect, an epidemic of visions and voices. The uncultured individual, misinterpreting an unusual occurrence, gives it an objective explanation entirely out of accord with the imaginative influences which fashion it, and even provokes the physical state of semi-wakefulness (sec. 218).

A belief prevails that sane persons who are perfectly awake observe these appearances. This is, I consider, a mistake, based on hasty judgment. We seem to be awake, but are not. Here is an illustration. You are on a visit, and have an improvised bedroom allotted to you, which is so situated that it forms a passage to another bedroom. On several occasions, shortly after you retire, you hear the occupant of the latter room mount the stairs, open the door, pass through, and shut the second door. You usually turn round and watch him cross your room. At such times you are lying apparently wide awake, thinking over the events of the day, wondering what the morrow will bring, or unravelling some problem.
You think yourself completely awake. You would smile at the suggestion that you are anything but alert; for what is to distinguish indubitable wakefulness if not calm and ordered thought? One evening, turning round to see your bodily familiar, he chances to ask you some simple question. You hear and understand what he says. Then you open your lips to reply, and . . . begin to utter incoherent sounds. Here is a second instance. I sit with my eyes shut, apparently fully awake. Some one enters the room, and, to my surprise, I find it almost impossible to open my eyes. Now since there is reason to believe that all hallucinations of the sane and healthy occur in this twilight state, I regard them as fully explained. [Test this; try and find instances to the contrary.]

I have only to add that what has been asserted generally as to sight, holds good of hearing and auditory hallucinations, and of the senses generally. [Illustrate from sound hallucinations.] There is no room to enlarge on the subject.

Johannes Müller (Über die phantastischen Gesichterscheinungen, 1826, p. 75) alludes for open-eyed visions, though he does not go into details. Delboeuf (Les Hallucinations à l'État Normal et Conscient, 1885) describes a waking hallucination, without attempting to trace its origin. Mariolier (Quelques Cas d'Hallucination, 1886) recounts a number of his own hallucinations, remarking that no direct differentiation is possible between reality and hallucination. Mariolier's case is not easily explained by my own principle. I must also refer to a series of articles in The Ethical World (1898-9) on "The Case against Telepathy," where I make an attempt to explain the present theories of telepathic hallucinations at the time of death.

The distinction between a hallucination and an illusion is supposed to be that in the latter case an object is present and that in the former an object is absent. Baldwin (Senses and Intellect, 1890), for instance, says: "In hallucination, all extra-organic stimulation is wanting" (p. 259). So Simon (Le Monde des Rêves, 1882) writes: "The state of hallucination consists in a sensorial perception without there being an exterior object to produce it" (pp. 98-9). Recent research has no more favoured this rigid division.

224.—DREAMS.

Dreams form undoubtedly the lowest plane of thought. The reasoning in the waking state is generally lax; but never does it approach, except in the insane, the chaotic stupidity of the dream-state. Nyt, were it not that we are often misled, we should learn that many of our dream-sayings are even less intelligent than we suppose them to be.

225.—Extra-Organic Stimuli in Dreams.

Let us first consider instances where the afferent or outer influence is evident. I thought that somebody knocked at the street door, was admitted, and walked noisily up the stairs. (This dream would not claim more than a second or so.) I woke immediately, and noted that the policeman had roused some servant who was anxious to rise early; that he had been answered, and was tramping away. Similarly, a short time ago, I thought I saw some one I knew, a grave old gentleman, walk about his room, ringing a bell. [Why the old gentleman?] Waking, I observed, that some early
vendor was using that instrument of torture in the roadway. Again, one morning I dreamt that I was in a lecture room. Some one whom I knew was making a few pointed remarks, which, as far as I remember them, were all nonsense. When he finished, there was general applause. Then all, except one, became silent. That solitary enthusiast declined to be subdued, and kept on stamping his feet. Various persons, among them the lecturer, approached, trying to reason with him, but in vain. [Why did the story take just this form?] Then I awoke, and discovered that, it being late, somebody in the room close to mine was knocking loudly on the wall. On another occasion I fancied that I was looking trains as they rolled noisily into a station. In the morning I was informed that there had been a terrific thunderstorm during the night. Thus I re-develop a dream-story where a pistol shot was the centre of a sensational occurrence the explanation of which I found, on waking, to be that some heavy object had fallen from the mantel-piece onto the brass sender. In this case, where the beginning forms the last act, we have to do with a perverse judgment. The noise is heard and the tale is woven around it—a second or two is sufficient for this—the feeble reason readily inventing a story to account for the afferent infliction.

The query in the text as to why the particular old gentleman appeared, raises an important question. It has been a standing subject of wonder why we do not generally dream about what occupies our minds seriously, and why we do dream about things of no importance. So Hildebrandt (Der Traum, 1881, pp. 11-3) mentions that passing things only are re-developed in dreams. Robert (Der Traum als Naturnotwendigkeit erklart, 1886) has the following highly ingenious theory to account for the facts. That which is fully thought out, is not dreamt of (p. 10); but thoughts which have been only hurriedly or insufficiently attended to, form the matter of dream-life (p. 9). In the dream, the hurried thoughts are digested, and hence a man would go mad if he did not dream (p. 10). Should the dream-effort be insufficient, hurried thoughts will recur in the waking state (p. 21). Indeed, dreams are reappearance of suppressed thoughts (p. 26): they are safety-valves (p. 26): they "have a curing and relieving effect" (p. 32); to induce dreams would probably mean the curing of insanity (pp. 32-3); it is to them, and not to sleep, that the morning’s freshness is due (pp. 37-8): they have, consistent with the theory, their origin in the waking state, though some images may be due to sensory stimulation (p. 43). In short, “the causes [of dreams] are always the same: the existence of unassimilated sense-perceptions or of uncompleted mental tasks” (p. 50).

I have no doubt that Robert’s view is to some extent correct. Already, in ch. 5, we saw that an undigested thought haunts us, and from that it is only fair to conclude that these thoughts will recur readily in the sleeping condition, since they are crowded out by urgent business in the waking state. To this extent Robert has vindicated his claim that dreams have some function allotted to them in the human economy. But no farther. I have specially tested the theory, with the following results. Undigested thoughts frequently vanish altogether; frequently they haunt us for very considerable periods; and frequently we recur to them in the waking state. On the other hand, in several cases where I have made attempts to re-develop the material of dreams, it has been evident that the thoughts or perceptions were in no exceptional sense hurried or undigested. Thus in one dream—evidently traceable to my struggling for breath under the bed-clothes—I could trace twelve memory pictures, all of recent origin. Each of these twelve I could account for completely, and not one of them bore the mark of hurriedness in any conceivable sense of that word.” So in another dream I saw, while in some dreams—thoroughfare, a large number of clocks on churches and other buildings; after which I
noticed that the name of the street was "Uhrenstrasse" (Clock Street). The day before I had waited for some one at the corner of a thoroughfare, and could find no clock by which to verify the time. I also looked several times at the name of the street, "Newton Street," so as to be sure that there was no mistake. These events did not worry me; they were the result of a method which I quietly apply all day long. Robert's view, as a comprehensive theory, falls, therefore, to the ground.

There is no lack of other theories. Most of them assert that the Reason, the Understanding, the power of Comparison, the Will or the Higher Faculties are on leave, and that the Associative Process, the Fancy or the Imagination are on night duty. I dismiss these powers as being superfluous. Fechner (Psychophysics, 1860, pp. 522-3) holds that the dream-stage has traditions different from those of the waking stage, and that it is without the education which we have had in the waking stage; the dream-life is different, in the sense that our country life may vary considerably from our town life. This view is in part correct, and I shall refer to it in Sec. 230. Miss Calan (Wonders of Dreams, 1893) also gives a good reason for the triviality of dreams. She says that the things which mean most to us are very complex "and depend for their reputation on the integrity of very many lines of association" (p. 334). Leaving out her "lines," we can readily agree that the organic tone or effort which is involved, as we know, in waking thought, and which is absent in dream-thought, accounts for dreams being grotesque and useless. Here all memory proper, except casual pictures, is excluded, and consequently we cannot live the waking stage over again in our dream-life. To this must also be added that centres much used, tend to rest; and that, therefore, the dream-life would normally be free from the echoes of the day. Indeed, the very slightness of a passing impression or thought may, when the attention is at its lowest, make it more suitable for re-development. Besides, the live interest which we have in the dream-idea excludes acting over again our waking life, while the peculiar forms of the retinal pictures favour the formation of certain images rather than others.

The query with which we started is not yet answered: Why the particular image? Why the particular order of images? Bearing in mind what has been said, I can only add the following. I agree with Spitta (Schlaf- und Traumzustände, 1882) that the feelings (Gemüth) or, as we might say, our moods, persist to some extent day and night* (p. 116). When, then, the brain slumbers rather than sleeps, these moods will, in the ordinary way, give rise to images and feelings. The first portion of the process is easily explained. For example, as I sit reading, my elbow twitches, and, being a little alarmed, I instantly imagine that some one is gripping me. Such lightning images are frequently observable, especially when one's health is affected. Given, then, for instance, a similar sensation whilst sleeping and an explanation will soon announce itself; we shall act as the fancy dictates. But why the particular image of the old man? The reply, so far as I can yet see, must be that the connection was not close; that the old man tumbled upon the scene, rather than walked onto it. The memory strings being loose, what comes into the foreground is almost regularly out of place. Perhaps some blotches in the dark field strongly suggested the figure of the old man. Whatever it be, it is the business of psychology to find it out by means of the experimental method. Giesler (Die Tiefe der Traumlebens, 1890) has an excellent study of the point raised in this note. Tissé (Les Rêves, 1890, pp. 200-2) also connects certain classes of dreams with the abnormal state of different organs. Volkelt (Die Traumphantasie, 1875, pp. 43-85) interprets details of dreams by reference to bodily organs.

226.—Intra-Organic and Efferent Stimuli in Dreams.

Systems originating within the body, on due to contact with the immediate surroundings, such as the bed, form a staple source of dream-life. I have already described the pictures seen at the moment of falling asleep.

*See also Volkelt, Die Traumphantasie, 1875, pp. 109-17.
These have their origin presumably in afferency as much as ordinary vision, though there exist probably various types of dreamers. They are frequently the peg on which the dream is hung, or the charmed circle around which the dream-story moves. With me at least they are almost the normal introduction to sleep, though along with them, other influences, especially auditory ones, have initiative power. The heavy breathing suggests seething ocean waves. The beating of the pulse in the throat suggests men on the march, some one running, walking, writing, or using a hammer,—in fact, every form of regular work. Especially are such suggestions rife when anything occasions the pulse to beat more loudly or more quickly.

Again, I have, so I believe, a fierce struggle with a man who nearly crushes me. I wake and find that my arm is resting heavily on my chest, and is the occasion of the unpleasant dream. Or I imagine that some one thrusts a knife into me, and on waking I detect a piercing sensation about the region of the heart. So I dream repeatedly that solely by stretching my hands and legs out straight I am able to fly in a slanting downward direction. After a time I discover whence the notion developed, and also connect it with the fact of extending the legs. I dream that some one has grasped my two hands, when I wake and find that I have the cramp in those parts. A man dreams that a bear is coming in at the window, and screams. Some one tries to rouse him; but the dreamer thinks the bear is laying hold of him, and becomes frantic. Thus I watch a friend dozing; suddenly his arm slips; he wakes, and, in reply to a question, he says that he imagined himself falling down the stairs, which could easily be imagined in half a second.

In by far the greater number of instances an organic stimulus may be at least surmised. For instance, I frequently dream that I am undressed or that I am dressing, and it is difficult not to link this with a superficial awareness of the fact that one is unclothed. The inability to satisfy ourselves in such cases and the consequent dream-developments are but a reflex of the unchanged stimulus. We cannot in the dream put our warm socks on, because the feet remain cold and uncovered. Hence a confused story, often lasting for a long time. Again, I repeatedly dream that I am thirsty and have something to drink, and so also with other necessities of nature; the want, under certain circumstances, gives rise to the corresponding dream.

The more carefully I record my dream-life the more I am convinced that at every point, with me at least, physical stimuli, combined with recent or permanent interests, originate and guide dreams. Take, for instance, one dream at random from my note book. I was, I don’t know how, floating or moving along in a canal, holding on to some railings close by the water. I seemed to proceed with great rapidity and ease. Then the water became suddenly deep. S. (whom I have not seen for four years, but with whom I am in regular correspondence) was in front, and he swam. The water then appeared to rise to my mouth. Then dry
land was espied, and the danger was somehow past. Then we entered a blind alley (the night before I had been in one). A number of persons were assembled, and some householder was good enough to let us pass through a door which led into a road." Why should I dream of a canal; why the extraordinary ease in movement; why the sudden slope in the canal bed; why the feeling about the mouth; and why the view of the dry land? The queries unmistakably find their answer in bodily developments which arbitrarily change, and which the imagination presses into its service. There is no logic connecting the parts of the story. Now take the second dream I lived through on the same night. "I dream that several of us were passing through a street, Miss X. among them (I had met her on the previous evening, and often see her). She was pushing herself alongside of the others (contrary to her character), thrusting me aside, when she fainted. I caught hold of her and shouted. At the same time she seemed (contrary to fact) a little thin woman of almost no weight, something like an India-rubber doll. Then I supported her head and shoulders; and C., aged 12, and T., aged 7, both of whom I see daily, held a leg each. I was angry with C. because he was carrying his burden anyhow, looking all the time at picture scraps (which latter thing he often does)." Here, also, as in the former dream, detail after detail suggests actual bodily developments. Looking over the notes of the third and the fourth dreams of that night, they read precisely as the first two. My notes generally, and the re-developed dreams of my childhood, bear equal testimony to the above interpretation. For example, I dream that I look at a disgusting spectacle which makes me feel sick, only to wake and learn that owing to a bad cold, my throat is full of mucus. The same night, and for the same reason, I dream that X. poisoned himself and that everybody advised him to take an emetic. Or, on another occasion, I think I feel hungry, and yet every dish inspires me, for the above reason, with loathing. I explain a multiplicity of dreams as having reference to severe colds and fits of indigestion. It also happens not infrequently that I dream of being sleepy or that it is very dark. Once I dreamt that I was running with extreme swiftness along roads and at night time, being totally unable to see any object and yet never colliding with anything.

Dreams of tastes and odours are universally acknowledged to be rare. Many (Ie Sommeil et les Rêves, 1865, pp. 132-4), Monroe (A Study of Taste Dreams, 1899), Ribot (La Mmoire Affection, 1894), Titchener (Taste Dreams, 1895), Weed, Hallam and Phiney (A Study of Dream Consciousness, 1896) are among the writers who mention experiments on the subject. Schwartzkopf (Das Leben im Traum, 1887, p. 13) believes that in dreams he tastes eatables and smells flowers.

Effereit activity also gives rise to dreams. Thus, moving my hand suddenly, I dream that I am opening a door. So, knocking the arm against some object, I dream of two men-of-war in collision.* Most important

* The Spanish American war was then proceeding; this and the preceding instance were experimental afternoon dreams, and are not distinguishable from night dreams. The influence of light in dream-vividness should be experimentally investigated.
in this respect, however, is our mimic activity, as when in our dreams we either speak aloud or just move the tongue or lips. In either case, as with sight, an illusory reality is suggested. A vividness results which misleads the rudimentary judgment, even to the point of waking the sleeper. The action involved in scanning the closed-eye field of vision, and the mimic movements of the lips, limbs and organs, induce a belief in a reality which differs from the waking imagination where these movements are normally absent.

227. The Place of Reason in the Dream-State.

Let us now examine the place of reason in the dream-state. "I woke at 3 a.m., in the middle of a dream. I was walking along a hard, sandy country road and over viaducts. It was very dull, and also raining. Once I dropped my umbrella, nearly losing it. I wondered as I walked back for it, how one could let slip an umbrella in rainy weather. (It may have been raining during the dream.) Nothing appeared to be clearly discerned; I redevelop only the road. I was walking along a descending slope, it being nearly dark. Meeting two lads, I was going to ask them how far I was from my place of destination. I spoke to them, making several unsuccessful attempts, until at last I mumbled out: "Graz." (The evening before, two boys had asked me to direct them. Though I knew the locality well enough I could not redevelop the street named. "Graz" is the place where an intimate friend resides.) In the distance I saw two square towers, but as in the dark. Then I met a man, aged about thirty, who told me I should have to retrace my steps as I had taken a wrong turning. He was travelling the same way, and so we kept on talking about one thing and another. We came near to a town. Before reaching it, my companion entered some building, while I waited outside. Then he called me, and I went in. It was a chapel; but it looked like a bare room. We went right to the front. There were two desks, square ones, which looked like packing cases, and faced the congregation. We sat down. The preacher stood a little to the left of us. I had only my felt slippers on. I did not kneel down. I could not find the place in the prayer book. The clergyman suddenly left, and my guide took his place. A radiantly blond and chubby fellow came up to me and said that he was ordered out for coming to church naked. I told my companion of this, and he replied that the man had frequently appeared in that way, being besides only a farm-labourer. To say that need-satisfying development was absent from this dream would be going too far. My reflections about the umbrella, my conversation with the stranger, my behaviour in the chapel, had reason in them. On the other hand, note that the word "Graz" was a chance shot, that the word "naked" was employed inexacty, which again implied a host of absurdities. The dimness of the towers, my not being able to find the right place in the prayer book, my meeting the lads and the stranger, the entering the chapel, the square desks, the clergyman leaving, the being remonstrated with, are all unreasonable circumstances. My attitude could not be accounted for except by assuming afferent in-
fluences constantly modifying the trend of what was after all a connected train of thought.

A dream is often much more grotesque than it appears to us when awake. We think that we are uttering a series of brilliant paradoxes when, on waking, we find that what we were saying was not even coherent. The many-syllabled words we employ suggest that we are drenching our companions with showers of magnificent thoughts. Hence an apparently intelligent conversation turns out to be sheer nonsense. I find many signs of that. The words “Graz” and “naked” are pertinent illustrations. So, dreaming that I am reading Spenser, I am astonished to meet with the word “bicycle.” Evidently the reading was a jumble of miscellanies. Thus, I am disconcerted by some one urging something quite opposed to his usual views. Most likely a haphazard phrase arrested my attention. Again, dreaming that I am amanuensis to George Eliot, I note that the remarkable passages which she dictates are already known to me, and what is new is very poor. Lastly, I try in vain to make sense of a large poster which I am reading.

Sometimes the reasoning is consistent. “I dreamt that I was out for a walk in a park. It was misty and dark. (Probably sleep had a fair hold on me.) A neighbour whom I did not personally know, nor recognize on reflection, and whom I need not describe, joined me. He asked me a question concerning the word ‘which.’ I explained that the h is to be pronounced before the tw that in Anglo-Saxon time it was so pronounced as well as written. I pointed out to him that in the middle ages tw was written for u, that the double v or uv was a double u; and that the sound of the tw was as that of u. (I had lately been thinking about the connection between letters and sounds).” In this dream there is something like perfect unity. Not an incident which does not fit in. My notes contain only one other example of consecutive thought, though not so good as the instance just cited. As will be seen, my dreams are on a much lower level than ever, I hope, my thoughts are in the waking state. If but once my day-thoughts were as confused as my night-thoughts, I should tremble for my sanity. With some persons consistent dreaming is perhaps more common. In their case, they are sufficiently awake to think clearly. This, however, will be referred to again later (sec. 232).

As to the unreasonableness of dreams in general, there can be little doubt. German, French, English and American authors give exactly similar descriptions of the essential nature of the dream-state. Binz (Ueber den Traum, 1878, p. 33) is within bounds when he says that “among ten dreams, nine at least are absurd.” So Macnish (The Philosophy of Sleep, 1830, p. 60) says that “the province of dreams is one of intense exaggeration – exaggeration beyond even the wildest conceptions of Oriental romance.” So Mumford, Waking, Sleeping and Dreaming, 1893, p. 24: “If when awake we touch the cold iron of the bedstead, we see the cause; but when asleep, we think we are cast adrift upon an iceberg.” So Sully, Human Mind, 1896, ii, p. 314: “Even the best of our dreaming is but a confused chaotic reminiscence of waking experience.” Sometimes, however, problems are solved in dreams; forgotten things are re-developed; and poetry is composed.

*Since writing the above, I have experimentally and exhaustively satisfied myself as to the general unreasonableness of dreams.
For my part, I have not infrequently believed myself to have performed intellectual feats in dream-life; when, however, I awoke, these feats proved tantalisingly absurd. Burdach (Physiologie, iii, 1838) recounts some striking dream-successes of his own, and Radestock (Schlafl und Traum, 1879), Alercrombie (Inquiries, 1838, pp. 289-91), as well as other writers, give a list of reasonable dreams. Such cases seem to show that those persons at those times were in a physical condition which widely differed from that of the ordinary dreamer. Reasonable dreams should be experimentally controlled. Cox (Sleep and Dream, 1878, p. 55) speaks of the "exaltation of the mental faculties generally" in dreams, and gives some doubtful instances in illustration. He forgets that the dream-stimuli are real, that illusions are constant and that day dreams are normal. Greenwood (Imagination in Dreams, 1894) believes that reasonable dreams are not rare. Of himself he writes: "Not rarely, but commonly I have dreams which are throughout as consistent in scene and circumstance as any of Mr. Kipling's stories for example" (p. 170). Is this, perhaps, a sly hit at Mr. Kipling? I ask this because the dreams of his own which Greenwood recounts are of the quality only too common among common mortals. That rest, in the form of sleep or otherwise, is often necessary before thought becomes clear on an important issue, is universally admitted. Hence I should consider it likely that overnight the haze should pass and that the morning should have surprises in store. Accordingly, it is not unreasonable to assume, wholly subject to experiment, that dreams should occasionally contain a rich gem. So few, however, are the hits, and so enormous the number of misses, that we ought to be surprised at the trifling results of non-waking reflections.

228.—Influencing the Dream-State.

It is worth while to consider the interaction between the waking and the dream-states.

Some years ago I left one country for another. Both the language and the environment were different in my new abode, yet for some two or three years at least, it was the old country; the old friends, the old tongue, the old customs, which monopolised dream-life. The recent did not exist for me when I had lapsed from the state of wakefulness. [Settlers in a new country would verify this.] I used often to wonder at the persistency of long-past happenings. This hold has not yet been completely relaxed, and occasionally even now the dream-environment is that of many years ago. Gradually, however, the more recent influences clamoured for admission to the stage. The old and the new mingled in clown-fashion. Persons who knew no English spoke that language fluently, while English voices resounded in the streets of non-English cities. It was only after some years had passed that the new world of action entered into almost undisputed possession of the wizard's court.

What is true of this general change, applies equally to less sweeping transformations. The death of a mother or a brother is as a sealed letter to the dreamer for many months after the event. At first the sad event is entirely ignored. Later on, the figures appear seldom, since we think less frequently of them in our normal condition. Yet for many years afterwards friends, who are now permanent underground dwellers, re-appear in dreams as if they had never forsaken us. I cannot find in my notes more than one instance of a dream in which a death took place. This instance is too striking and recent to be passed over. "I dreamt confusedly that my mother was late in coming home; and that people said she was dead."
That seemed to me unreasonable. I saw then one phantasm and then a second. (I was then studying telepathy.) I became afraid. Somehow the conjectures proved correct, and I broke down completely and repeatedly in consequence. The explanation of the dream is simple. The previous day at noon some particles of dust had entered my eyes, and I was unable to dislodge them. During the night I woke several times on account of my eyes watering. Hence the tears in my dream. The continuous watering was interpreted as crying, and a story was developed to account for this.

As with the dead, so with the living. Friends who are thousands of miles away, familiarly mix with those in our immediate surroundings. Relatives whom we have not seen for years, talk to us without causing any astonishment.

So is it also with dream-notions. Once the boyish spirit ruled. Any one who hurt us, our friends or our goods, was made to pay dearly for his audacity. We rated him, we fought him, and perhaps we went to the length of killing him. As we grow more sentimental, traces of the change are observed to trickle into the lower rivers of dream-life. If any one is angry with us, we try in an exaggerated style of friendliness to reason with him and calm his fury. In romantic fashion we refuse to stop the thief, or to return blow for blow. We allow ourselves to be operated upon like dogs in the vivisectionist's laboratory. When the captain asks for volunteers to lighten the overladen boat, we jump overboard without hesitation. These inspirations, however, do not embrace the whole dream-field. While one night chivalrous, the next night we more than feebly assert our rights.

Take one special instance. For various reasons I have become a total abstainer from intoxicants. Shortly after my change, when in a dream I was thirsty or at table, I had my glass without any qualm of conscience. At last the message has reached the dreamer: Thou shalt not drink intoxicants. [Deliberately suspend habits, and watch the dream-effect.] Again and again I drink, and then am conscience-stricken. “Why did I drink it? Had I not said that I would never taste it again? What in heaven's name induced me to do it? Why did I break through my resolution?” The answers I tendered are often as interesting as the questions: “I had forgotten.” “I was ill.” “I required the potion.” “I was persuaded to.” “I wanted to take it.” Gradually a startling and ingenious solution gains ground: “I have ceased to be an abstainer.” I am, then, in the peculiar condition that while, in the waking state, I abstain from, and am never attracted by, intoxicants, as a dreamer I take them pretty freely—more freely than I ever did before I was an abstainer. The dream-personality here, as in other instances, differs from the normal individual. Were the question of drink displaced by that of purity, we should sententiously maintain that our failure was not due to psychological conditions, but to a depraved free will.

In the above instance there was no endeavour to deliberately influence the dream-state. But occasionally I have made experiments in that direction. [So might the student.] For example, before going to sleep I impressed on myself that I did not desire to dream of walking about in
my night clothes, and, also, that I wished to wake when such a suggestion arose. At first, no effect was traceable. Then, in my dream, I reasoned that there was no harm in such conduct; then, that I have changed my opinion; then, that I have walked into the road while asleep; then, that I have been stripped of my clothes; then, that I have gone mad; then, that it was too hot; then, that I was in a tropical country, etc.; etc. After each defeat I place the argument on the black list, and repeat it as a warning before saying good-bye to the waking state.* The resolution generally succeeds as far as conveying the message to the dreamer is concerned, though, as we see, it has no permanent effect. After many efforts, according to agreement, I wake or dismiss the subject. Then the notion slumbers for a time. I now discontinue my nightly resolutions, till the questionable dreams start once more. [Experiment for yourself, keeping compact notes.] Complete success I have never been able to boast of. Possibly, if systematic efforts were made to rationalise one's dream-life, they might be successful. As the matter stands, our influence is painfully limited. Probably indirect methods are discoverable which would effectively cope with the stubborn tendency to unreasonableness and, if necessary, even with dreams altogether.

The ethics of dream-life are a never-failing topic of discussion. Maury (Le Sommeil et les Rêves, 1865) thinks himself different awake from what he is when asleep. He says: "In my dreams I always succumb to evil inclinations" (p. 90). I am glad to say that I cannot subscribe to this. Hildebrandt (Der Traum und seine Verwertung für's Leben, 1861, p. 52) strongly holds that our moral state in dream-life, as far as the initial motive is concerned, frequently reflects our character, and that dreams may often yield food for ethical reflection. Spitta (Schlaf- und Traumzustände, 1882) disagrees with Hildebrandt. We are, according to him, not responsible for our dreams. He often dreams of climbing mountains, a task to which he has a strong aversion (p. 187). When we are awake, objectionable thoughts are repressed; in sleep they become overpowering (p. 191). Spitta denies that we can tell a man's character from his dream-behaviour (p. 196). Bouillier (De la Responsabilité Morale dans le Rêve, 1850) holds that we are to some extent responsible. Halffter (Schlafen und Traumen, 1854), a Roman Catholic, asserts that there are no ethics in dream-life (p. 319). He says: "The greatest crimes which are committed during dream-life, and of which we accuse ourselves there and then, are as void of moral guilt as our most heroic dream-deeds are void of moral desert." (p. 319).

Yet we are indirectly responsible. Schwartzkopff (Das Leben im Traum, 1887) returns to Hildebrandt's position. He holds that momentarily we often have bad thoughts in the waking state to which we pay no attention (p. 79). Pure men dream purely (p. 80). Lastly, we may mention Giessler who, in the last chapter of his book (Aus den Tiefen des Traumlebens, 1889), discusses the morality of dream-life.

Seeing that by general consent our dream-condition reflects our waking condition,— "the miser dreams of wealth, the lover of his mistress, the musician of melody, the philosopher of science, the merchant of trade, and the debtor of duns and bailiffs" (Macnish, The Philosophy of Sleep, 1838, pp. 64-5),—I am inclined to agree with Hildebrandt's and Schwartzkopff's moderate statements that there is some relation between dream-life ethics and those of the waking condition, just as there is a general relation between dream-life and the waking state.

* Nelson (The Study of Dreams, 1888, p. 376) tells that he effectually learnt to dismiss objectionable dreams by recalling them before falling asleep. Abercrombie (Inquiry, 1838, p. 207) refers to the subject. Radlestock (Schlaf und Traum, 1879, p. 151), however, says, that "we possess no power over dreams."
The proper course is to investigate dreams experimentally, testing the senses, the imagination and the judgment. Not until that is done can a science of psychology be satisfied. The difficulties are perhaps not greater than in rope walking, or in fine mosaic work. We must bring to our attempted observations the smallest amount of attention which will enable us to register results. We must so train ourselves that our attention shall act almost mechanically. My own labours in this direction, if I exclude deliberate dozing for purposes of observation, have been scanty. A few times in going to sleep I have with great freedom observed what happened, and changed the dream-pictures experimentally; but of these occasions, which convinced me of the possibility of dream-experiment, I do not possess many notes. Here is one. “In composing myself to sleep last night, and while yet fully awake, the retinal images appeared to be very distinct. I could see, at will, any quantity of any class of tree or shrub. (I had spent that day of Spring in the country.) Everything was figured, and yet without much detail. I also saw any number of birds—they resembled dots—flying rapidly to and fro. Looking deliberately to the imaginary ground, the turf seemed very real, even to the green colour which I especially desired to see.” In this, as in other experiments, I have noted that colour, except for shades of light and dark, is normally absent with me. I have also frequently analyzed the material out of which the objects are composed. The lights and shades, again, appear to be manufactured at will. Concentration or movement of attention or a similar factor must account for this strange fact, the change in light taking place more readily as we approach deep sleep. The outlines themselves are usually the result of selection, and the form which the changing lines, dots and colours take, depends both on the kind of material present and on the trend of our thought. I have, however, observed that changes are freely inhibited and accelerated. It may be added that I have on several occasions attempted to distinguish between retinal vision and imagination. There seems to be a clear division between the two, my eyes appearing to turn inward and upward when it is a question of imagination, and outward when the dark field is explored. [Question this.] How far these two classes approach each other, or are represented in dreams, I do not know. For the same reason, I find it difficult to decide whether the eyeball is in motion in retinal vision, though the evidence certainly points that way. [These various assertions might be separately put to the test by several advanced students.]

My records include one experiment of another order. “In going home I seemed to lose myself, I did not know how. I stood in a square where everything looked neat and stately. The scene reminded me of a Continental city. It struck me vaguely that I was dreaming, and that I would test the reality of the architecture by examining it closely. Then, to my amazement, a pillar I looked at, or touched, began to twist, and everything which caught my fancy kept changing, convincing me that I was dreaming. The contortions of the houses were vivid and most ridiculous. It seemed to me as if I had touched the sheets, and as if these had trans-
ferred their plasticity to the picture." * The absence of localisation, of touch, etc., in dreams, is also traceable in the semi-waking condition. On two occasions (and many times since) I have, to my surprise, observed that when nearly asleep I could not tell the position of any part of the body; for instance, when I wished to ascertain where my arm was, I had to move it. [Test this.] I have also noted several times that I find it most difficult to tell whether my eyes are open or closed under the circumstances: I think that I have raised my eyelids and look around me when, in truth, they are closed; I try several times before I partially succeed; and, to the end I am doubtful (sec. 19).

Nothing which can be considered adequate has yet been done to study dream-life experimentally. Müller, as we saw, very thoroughly observed the slumber pictures, but his was no experimental study. In the case of the ever-quoted Maury the experiments were on so limited a scale that they are of little importance. Ladd’s note, based on the study of Dr. Bow’s dreams—the best and perhaps the only method for serious purposes—is excellent as far as it goes; but it does not go far. The quantitative school has scarcely done justice to this subject. Nelson (A Study of Dreams, 1888) attempts to show, in a mechanical manner, that a sex curve may be established as regards dreams both in man and woman. The most important study, however, is that of Miss Calkins, Statistics of Dreams, 1893, where 375 dreams, of two persons, are analysed.

The scholars of the psychological laboratory remind one of lawyers who, in quick succession, appear learned in a variety of subjects; or of restless individuals who can never settle down to a task. I speak strongly, because I feel that the era of stray and inconclusive essays must draw to an end. If it be an experimental study of dreams, let it be such truly. Let the facts be minutely studied and noted; let every state be experimentally produced; and, after sufficient study, we shall have an essay or a book worth reading; or if the results are doubtful, let the experiments be forgotten. For a psychologist to attack a problem after a problem, leaving each unchanged, is as idle as to sit by doing nothing. The psycho-physical school must determine whether its business is to drug the market with indecisive columns of figures, contrary to the traditions of science, or whether it is to advance psychology. If it is to be the latter, we must discourage statistical tit-bits.

In sec. 8 it was already pointed out that psychologists first lauded the quantitative method because that method was supposed to enable men to dispense with introspection; but that it gradually came to be felt that quantitative results were meaningless unless introspectively interpreted. Such books as Sanford’s Course in Experimental Psychology, 1897–8, and Titchener’s Experimental Psychology, 1901, take us a step farther, for they quietly dispense with the quantitative method altogether. This is a great gain. There is a likelihood now that we shall no more hear of years spent in idly repeating ill-conceived experiments, and that we shall no more be dazed by inextricable rows of inconclusive figures. The danger, however, is that men will now entirely lose themselves in aimless observation. It is good to be exact, and it is well to simplify the experiments; but it is also necessary to vary the conditions incessantly, to be unhampered by untested theories, and to be ever aiming at generalisations. When psychologists will follow along this line, which is the line pursued by men of science generally, they will reach those valuable results which are the invariable reward of the application of the scientific method.

The suggestion to observe the nature of movement on the sleep border came from Bradley (On the Failure of Movement in Dream, 1894). I have also observed that both the muscular and sensory tone are greatly reduced under the circumstances: pinching, for instance, produces little or no effect. The subject is discussed towards the end of sec. 19.

* * * I have frequently since made similar observations.
229.—The Origin of Dreams.

We have reviewed the facts of dream-life. There can be no question that dreams, when considered as a class, constitute only a lower category of thought. In many hundreds of observations I have not met with examples which display features requiring a treatment different from that of the waking state.* I assume, in consequence, that the conclusions arrived at in the preceding sections of this chapter are sufficient for our guidance.

We have learnt that in the absence of perceptible bodily motion thought cannot begin nor proceed. When we examine the collected materials which must verify or condemn our induction, we find them to be in full accord with our general conclusions. At every move in our investigation we have encountered afferent and efferent factors. Not only were the dreams started by some sense affection; but they were continually fed from without. Aware as we are that every kind of bodily development is able to start and rule a dream,—I have records of every class of sense dreams,—we can easily perceive the reason why many dreams appear to lack an objective factor. Difficult as it is to track dream by dream to its lair, we must nevertheless conclude, in view of the evidence, that subject to the law of excitement (sec. 109), their origin is normally afferent, efferent or intra-organic. Experiment in the waking state has shown us that the flames of thought subsides if not fanned without intermission by afferent influences. We are, therefore, bound to assert that “suspension of afferency equals the suspension of dreams.”

We recognised the place of effort in the waking state. We agreed that highly developed products are dependent on hard labour, while ordinary organised reactions point to much less effort and consequently to a reduced class of thought. When we come to dream-life there is a great drop. The smooth plain of random fancies appears, when viewed from the much lower level of the dream-depression, as a rocky mountain. We find, accordingly, that effort is at its very lowest in the dream-state. To this we owe the confused flow of units or ideas, the unintelligible sentences, the ready determination of thought by chance systems of a primary and a secondary character, and the want of intelligent originality. Hence all strenuous thought is excluded, while memories dating far back are either not admitted or perverted. The brain is too low-toned to systematise the given data. Thought drifts along helplessly, catching at any suggestion however absurd.

The effort factor cannot be over-estimated. As we learnt in sec. 134, our efforts are as frequent as the tick of a telegraphic instrument in action. Again, effort enters to a tiring degree into strenuous thought, for there

* Most writers on the subject fully agree that the facts of dream-life are to be explained on the same principles as those of the waking condition. Schwartzkopf (Das Leben im Traum, 1887) echoes this opinion when he asserts that, “as a whole, the elements of the waking state are found in the dream-condition” (p. 20); and on this principle he explains all that, in dreams, is unique, fanciful, disconnected, rapid and hazy (pp. 23-31).
obscure or far off memories are required, and recent and well known ones have to be kept at arm's length. So important is this factor that consistent thought is hindered by a low state of health, and accordingly, when we are unwell, all sorts of irrelevancies and trivialities impede our thought. Things that, in a normal condition, we can dismiss, recur again and again till we are tired of dismissing them. Every attempt to pursue an issue is frustrated by fits of distraction. In normal life it is only after years of training that an objectionable thought can be prevented from developing if it is based upon some rooted need; but we can dismember it as soon as its development commences. At a restaurant I see the waiter approach, and I almost ask him for a plate of "Mr. Jones," of whom I am thinking. So, recalling Ladysmith and a bridge near by, I catch myself saying, Ladybridge. In dreams, where the position as to effort is changed, we expect curious results. Re-development will neither be pertinent nor extensive, and hallucinations will take its place. Thought will not be selective, but will be wandering, picking up any stray impression and vainly trying to fit it into the scheme of things. Since needs persist into the dream-life, notions of easily satisfying them will arise, and resist our feeble attempts at dismissal. With the strings relaxed and the sense of focalisation gone, hallucinations of the various senses become the rule, and hence, again, the seeming reality of the dream-state. There is, as we see, a world of difference between the springs of normal thought and those of the dream-state.

Looking over my records, I observe that recent or recurrent events form, in disguise, no small share in the dream-economy, and if that be so, we should perhaps allow that under certain circumstances thought may be started centrally. Still, a recent or a recurrent happening is only a few degrees removed from one taking place now. The great wave of intruding influences gives rise to smaller waves which, for a time, follow its track. It is, indeed, difficult to tell how far the dream-contents are recent, old or the result of hallucination; but the closer our analysis, the more we seem to find of the recent. Over and over again that which is strange is reducible to a compound of what is recent. There is only space to consider one example: "I dreamt I saw N. He asked Mrs. Z., in a very solemn manner, whether he could lend her any money. She replied she did not require any now; but he could bring some in ten years' time. N is some one I well know. I spoke about his being ill to a mutual friend about 7 p.m. last night. Again. N. has intimate business relations with Mr. Z. But why was the name of Z. mentioned? This is very simple. Last night, about 10 p.m., I spoke to some one about a famous money lender. My companion thought that he was an Irishman, and suggested that his name was Z. First then floated in N.'s picture; then I dimly re-developed the usurer incident. Mr. Z., being an Irishman, a friend of N.'s, and the usurer's name having some resemblance to Z., the latter name developed."

*Words are thus frequently mistaken in dream-life, and help to add to the confusion.*
“Mrs.” was one of those slips which so frequently occur. I cannot re-develop seeing any lady. As Mrs. Z. is rich and N. very much the reverse, reason rebelling, Mrs. Z. declined. The “ten years” were the first words which shot up. Again, N. looked and spoke very gravely. Last Tuesday night I addressed a public body, and felt as grave. The only image of the dream which was re-developed was N.’s, the only one I knew, and he stood out strikingly clear.” Apart from a very careful analysis dreams give no hint of what they owe to recency. We shall accept the fact that dream-existence draws nourishment mostly from what-is recent.*

Granted now that extra-organic stimuli are necessary for dreams, as for thought generally, does that enable us to tell whether all sleep is full of dreams? A definite answer is impossible in the present state of knowledge. We know the chaos which rules dream-life and we are aware (ch. 2) of the condition of dozing when the world of thought is like the sounds emanating from an empty sea-shell. There is, therefore, no difficulty in conceiving a dreamless state, and the facts themselves, as far as known, certainly favour that hypothesis. The dreams are vivid in proportion to the length and breadth of the neural excitement. When at normal rest, therefore, we have every reason to surmise that sleep offers a blank from the point of view of dreaming, at least to the degree of excluding developed sense complexes and perceptible elaboration. The normal periods of dreaming, early in the evening or late in the morning, also favour the notion that only in ill-defined slumber do we dream. Besides, we are bound to assume that the effort necessary for consistent topical thought is absent in deep sleep.

In sec. 132 we learnt that there is generally no setting to our memories. This fact alone broadly distinguishes re-developed from pre-developed life. In the dream-condition this difference is obliterated in an ingenious fashion which powerfully aids the illusion of reality. The method is simple enough. *As our eyes turn in any direction, so an imaginary setting is constructed.* [Tilt this.] Dream-imagery is thus made to depart seriously from memory and waking imagination.

The importance of the manufactured setting can scarcely be over-estimated in an explanation of dream-life. Yet there is one further characteristic feature which we must notice. “I have observed during the last few days a new detail of dream-life. Last night I dreamt that I was approaching a horse (I did go up to a horse grazing in a field yesterday, about 4:40 p.m.). I was saying that I must be careful (so I said yesterday), when the horse made a sudden grab at me. About two nights back I dreamt that I was on a bridge, and saw one boat and then another, and then there was a collision. Then I wondered whether the bridge was safe, and it at once began to appear defective. The night before the last mentioned, a horse escaped and I tried to prevent it coming into the house, yet an opening

*Sue Max Giesler’s admirable analysis of dream-life, in *Aus den Tiefen des Traumlebens*, 1890. It was his work which suggested to me the study of the recency factor.*