"the good" and "the bad" which those profess with whom we are thrown. These rules of conduct and sentiment constitute Society. They have their heavy sanctions if violated or impeached—disgrace, persecution, imprisonment and even death. The methods of eluding Society constitute a highly interesting chapter in the history of civilization. It is not difficult for the shrewd, and seems greatly to enrich life for certain temperaments, whether one be a burglar, a story-teller, or a philosopher. Such achievements seem frequently to evoke sympathy among the ninety-and-nine. Wholesale and whole-souled deceit have established the reputation and fame of many a hero from Jacob and Ulysses to those in high places to-day. Boldness of thought and its expression are less likely as yet to arouse primitive enthusiasm.

WORDS VIEWED AS DEEDS

One of the most stupendous elements in civilization has hitherto been only casually mentioned—words. Without language civilization could hardly even have begun and certainly could never have attained its higher forms.

CIVILIZATION

Speech underlies thinking and conscious planning and research. It does more. It creates a world of ideas which interpenetrates and seems to transcend that of the facts of human experience. What pass for facts are indeed so moulded by our notions of them that recent philosophers are less and less confident in their efforts to separate the functioning of ideas from that of facts. Much has been discovered of late which serves to revolutionize the older theories of language and thinking, and to eliminate some of the age-long quandaries in which philosophers have found themselves involved. These new views can be only briefly suggested here.

The Fourth Gospel opens, "In the beginning was the Word; . . . All things were made by it; . . . In it was life; and the life was the light of men." Goethe declared that in the beginning was the *deed*. The most recent writers who deal with speech would seek to shed new light on civilization by recognizing that words have always been deeds. They have always been regarded as wonder-working acts; they create things which without them could never exist;

they are the chief light of man—and his darkness as well.

Making noises is a conspicuous animal trait. Katydids, frogs, whippoorwills, dogs, and many other creatures exhibit a tireless patience in this matter. Man, too, is a great chatterer. His fellow men may be bored by his talk, but they are likely to be scared by his silence. It is portentous and bodes no good. To keep still is an unfriendly act. So, as Malinowski has pointed out, one of the many functions of utterances has been reassurance and the expression of companionability. The cries of animals as related to their needs and behaviour are only just beginning to be carefully studied. Whitman and Craig have discovered a marvellous correlation between the ejaculations of pigeons and their ways of life. Köhler, Yerkes and others are attending to our nearer relatives. But all that needs be noted here is that human language must have emerged from the spontaneous sounds made by pre-man.

Only when men began to make pictures of events and gestures, and painfully developed writing from the pictures have we the least actual evidence of language. The Egyp-

tian inscriptions illustrate picture writing and its later and most ingenious metamorphosis into sound symbols—an alphabet. This happened five or six thousand years ago. But it is clear from the Egyptian language that its surprising complexity and sophistication imply an antecedent development of incalculable length, to judge from the slowness of man's material inventions.

While the beginnings of language are hidden from us by the lapse of hundreds of thousands of unrecorded years, there are several new ways of coming to a far better understanding of them than hitherto. There are historical and contemporaneous sources of information which have been exploited of late and serve to revolutionize the older views. For example, the so-called primitive languages (until recently, never reduced to writing), afford a sufficient proof that words are fundamentally acts, closely related to man's other conduct. Then, watching the way that babies—the Latins aptly called them *infantes*, or speechless creatures—learn to talk, greatly re-enforces and corroborates the evidence derived from the study of "illiterate" tribes. Lastly,

anyone who has learned the trick, can substantiate the same thing if he tests the babble always going on around him.

We have already noted one way in which speech is a mode of action, a friendly gesture, not an expression of thought or conveyance of ideas as philosophers have taught us. "How do you do?" is not a question to be answered under usual circumstances. One concurs in the obvious statement, which conveys no fresh information, "Fine day, sir." These are just tail-waggings, like taking off one's hat, bowing, smiling and hand-shaking. We can, however, do far more with language; we at times can strike with a word more safely and more effectively than with our fist; by words we can cower, and dodge, and elude danger. Those in highest standing in all communities make a living by words, unwritten and written. Whole professions confine their activities to words,—clergymen, teachers (of the older type), lawyers, politicians; brokers deal in alternately saying "buy" or "sell." Doubtless other things lie behind this trafficking, but words are effective acts, or so intimately intertwined with them, that it is impossible to say where one sets in and the

other ends. Pure talk and written words seem often to do the business without the intervention of so-called things. The magic operations and achievements of words can be observed everywhere and in all ages. Jacob and Esau struggled bitterly to win a blessing from their blind old father. His words were momentous. They might cause unborn generations to bow down before his son's offspring or doom him and his children to perpetual slavery.

As a clergyman of the 18th century remarked, "Words have a certain bewitchery or fascination which makes them operate with a force beyond what we can naturally give account of." Joy and infinite woe follow in their train; from which our wordless ancestors must have been spared. The main emotional structure of civilization—so poignant and so unique an element in human life—is largely reared on words. They serve to establish new orders of sensitiveness and excitability. Words increase the clarity of our memory to a tremendous degree and at the same time they vivify imagination, which could exist on no considerable scale without them. With these word-created adjuncts we can

elaborate our hopes, fears, scruples, self-congratulations, jealousies, remorses and aspirations far beyond anything that seems justified to the onlooker; we can project them backward into the past and forward into the future. Words can rear more glorious palaces and dig deeper, darker dungeons than any made with hands.

TALKING AND THINKING

What has so far been said of the recent views of language helps to explain the newer interpretation of the old terms mind and reason. These seem to be processes, as we have seen, rather than agents. They are ways of doing things rather than things themselves. John Dewey calls his admirable little book on mind, *How We Think*. When older philosophers began to think about thinking, and how by thinking we reached truth they commonly found themselves writing very long books, very hard to read; and they called their great theme epistemology or the theory of cognition. The effective thinking which has built up civilization has not, however, relied upon their treatises; nor has it been

influenced by them. Two or three considerations only can be touched upon here which impress recent students in investigating thinking.

Thinking and words go together. For thinking, to be clear, has to rely upon names and their various associations with one another. For instance, grocer's bill, cheque-book, fountain-pen, envelope, stamp, letter-box are names put together in a particular sequence. Of late there has been a good deal of discussion as to whether thinking was not always talking quite noiselessly to ourselves. A child will first utter sounds at random, then begin to find that the sounds he makes bring things; then he gets to naming with vast enthusiasm; then he prattles too freely and inopportunely to please his elders; then he may merely move his lips—as many childish people continue to do—and finally hold his tongue. It can be shown, however, by appropriate tests that this suppressed talking is accompanied by muscular adjustments of the vocal organs which indicate a silent execution of the words and sentences. We can say openly "That's too bad," or mutter it, or adjust our organs so as to say it if we

wished. This suppressed talking seems to be thinking. That all thinking is merely talking to ourselves many will doubt or deny. While some minor reservations are justifiable there is, however, an overwhelming mass of evidence, derived for instance from the study of deaf mutes, that fortifies the contention stated above—no words, no thinking.

But thinking can easily be seen to be of several varieties. There is the meandering succession of recollections, vague apprehensions, hopes, preferences, disappointments and animosities which has come to be called *reverie*. It underlies other and more exacting forms of thinking. It is found on inspection to consist of recollections, anticipations, excuses for past or contemplated conduct, reflections on the unfairness of our fellow creatures and of the world in general; or assurances that all is well and must in the nature of things remain so. Ordinary daily planning is an essential form of thought—making homely decisions and adjustments. Underneath, we can perceive the reverie flowing as a sort of undercurrent—for thinking is very complicated.

We occasionally turn our thinking to trying to find out

something that we do not yet know. This may be the result of mere personal suspicions and vulgar curiosity, or of an honest desire to improve a defective social situation, or learn more of light waves, Chinese paintings, psychoneuroses or investments. In dealing with the workings of the physical universe a special kind of thinking, the mathematical, has produced results that tend to safeguard the investigator from the usual prejudices which beset us in all thinking. It is a peculiar, highly refined language, or way of talking about things, by employing the vocabulary of sines and cosines, logarithms, constants, variables, roots, powers, etc. It has proved to be a wonderfully fruitful way of talking about light, for instance, and the nature of "matter" and "force" and in dealing with engineering problems. Few are addicted to this type or any other variety of scientific thinking.

Most practical inventions seem to proceed from our power to experiment by thinking; to fumble and stumble mentally, and sometimes succeed. This mental trying-out is a kind of trial and error. It cannot proceed long without various exter-

nal acts to check up the guesses and inferences produced by meditation.

One of the most novel and promising methods of learning more about all kinds of thinking is abnormal psychology. Illusional and obsessive thinking which fill the mad-houses appear to be only the exaggerations of the thinking of those at large. The psychiatrists hold out hopes of discovering through their special knowledge, and a study of infants and children, ways of eliminating or reducing some of the vices of civilization as it has hitherto developed. To them civilization is in many of its manifestations a species of mild madness; these can only be eliminated by a great change in the way children are brought up, so as to obviate the maladjustments and distress incident to a rapidly altering cultural environment.

Men and women think not only when they are awake but when they are asleep. Their sleeping thoughts and visions and experiences we have learned to set off sharply—far too sharply as it would appear—from waking thought. Primitive man did not do this. He did not deem his dreams mere

illusions, comical or distressing, to be banished when he opened his eyes. They were not negligible to him but quite as real and instructive for conduct as what he saw in the day-time. Indeed they had a weight and authority superior to the pronouncements of daily experience; and they served vastly to widen it. What civilization would have been without the manifold influences of dreams it is quite impossible to guess. Had man been dreamless would he have had his religions, his symbolism and his allegories, his poetry and much of his art? This much at least is assured that the beliefs and practices of primitive peoples are in many cases directly attributable to their dreams. Later beliefs and practices of more elaborately civilized peoples can usually be traced back to primitive ideas, which seem to be the soil from which they sprang. So we have to conclude that dreams are one of the most remarkable factors that have entered into the fabrication of civilization as we know it to-day.

When asleep we find ourselves visiting distant places; for instance when walking the streets of Paris we suddenly wake in New York. How could early men escape the con-

viction that they had a second self which could wander forth from the body, leaving it behind in the hut, while the "spirit" led for a time an emancipated and adventurous existence freed from the slow and lumpish flesh? Then in dreams the dead appear to us in full life and activity. They may admonish or fortify us; rebuke our departure from the old ways, or fill us with assurance of success. The North American Indians shared the confidence of the ancient Hebrews and Romans in dreams. In India and China the veneration of ancestors forms a highly practical obstacle to the introduction of Western institutions. So have we here, without the possibility of much question as to the main issues, a fair explanation of the original belief in the spirit or soul and its survival of death. We have much more. We have the dawn of the gods and the demi-gods, and the whole foundation of beliefs about supernatural beings and their converse with men; their anger and the possibility of their propitiation by sacrifice.

LOOKING FORWARD

In the preceding sections of this article certain important

considerations are enumerated which escaped until recently the attention of students of mankind. They are clear enough when once pointed out. But it has always been a tragic trait of civilization that the obvious has been difficult to perceive, for it is too familiar to catch our attention. It requires a peculiar penetration to discover what in all discussions we are unconsciously taking for granted. And what we are most prone to take for granted are unrevised childish impressions.

There is much complaint of the childishness of mankind, which has become more conspicuous with the democratic assumption that everyone should have his say. Langdon-Davies' *New Age of Faith*, and E. C. Ayres' *Science the False Messiah*, to cite two examples, dwell with some petulance and bitterness on the easy gullibility and obstinate ignorance of humanity. They assume standards of intelligence which obviously do not prevail, as one reads popular newspapers, sermons and political speeches. They are disappointed, but have no reason to be surprised. Why should an ex-animal not have made grotesque mistakes as he