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CONTENTS

THE RELATIONS EXPRESSED BY THE PASSIVE VOICE

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ORIENTATION

Were a definition of the passive voice required, all perhaps would agree on this: it is a system of verbal forms whose meaning differs from the meaning of the active—very greatly. There might not be so close agreement as to what the difference is.

The popular conception may be indicated thus: "The cannibal ate the missionary" tells of *eating;* "The cannibal was eaten by the missionary" tells of *being-eaten;* eating and being-eaten are very different; the active voice expresses one; the passive voice, the other;—a conception surely plausible, enough so to arouse a curiosity to learn where it would lead, were it adopted. If, for instance, being-eaten is different from eating, presumably also being-struck is different from striking. Corbett striking Sullivan implies for Sullivan a being-struck by Corbett. If being-struck is different from striking, the blow is two phenomena, instead of one as commonly supposed. Every other doing must be matched by a different being-done. Activity then operates in couples—unless perhaps this seeing it in couples be after all the merest seeing double.

In talking of abstractions I find relief in over-frequent use of "you" and "I"—still more in illustrations that amuse me. Accordingly in dealing with this glib conception of the passive, I invite you, hoping to save us both some weariness, to think a little more in detail of the cannibal. In particular, comparing his eating with his being-eaten, you perceive of course the possibility of minor differences. If the cannibal is eaten by the missionary, better manners may be looked for; knife and fork and napkin—even finger-bowl—may complicate the function;

grace may be said. I hardly think however that we heed these differences, or others of their class. What occupies attention is not a difference between the cannibal's eating and his being-eaten; for his being-eaten is merely after all itself an eating—the missionary's eating. Accordingly the difference between the cannibal's eating and his being-eaten reduces to a difference between two eatings—his and the missionary's—more specifically, say, two dinings; and, howsoever much we amplify or sense these in their details, we seem, as said above, to heed their difference very little. What is heeded rather is the crucial question: Who is diner?—Who is dinner?

This fallacy of differentiated doing and being-done should occupy us only long enough, it seems to me, to laugh it out of court. For anyone who may think otherwise I do my best in argument on pp. 65–71. Meantime let the cannibalistic dinner last a moment longer. Let it pose in your imagination as a drama. Let me carry figurative juggling so far as this: the substitution of the passive for the active does not change the play (the essential nature of the eating); and surely no inflection of the verb could change the players (say "denature" cannibal or missionary.) Inflection might however assign or reassign their parts (of diner and dinner). You, who played Macbeth to my Macduff in an active presentation, may exchange with me in a passive.

The hint derivable from play and players is no doubt inaccurate. I mean it only to suggest that study of the passive voice should give up any being-done distinguishable from doing; that, in a doing, two are likely to be implicated—to participate; and that the nature of the implication, and the mutual relation of participants, may vary. Now it calls for little straining of imagination, to suppose that both the active and the passive voices may express this nature—also this relation—the passive differing in such expression from the active. Indeed it seems to me that this precisely is the passive function; but I can hardly make my opinion plausible or even clear, except by leading up to it through further observations.

These I shall confine so far as possible to verbs expressing genuine action, which, as I suppose, we all conceive as roughly,

say, an output of energy. Further, in linguistic thinking we absolve ourselves from all responsibility to Physics, regularly looking for (an energy-creator, or) a putter-out of energy—imaginary only, as is further indicated, pp. 9–10. Our further search for what the output energy effects, or affects, is the more permissible that, were there no affecting or effecting, it is far from easy to imagine how the putting-out of energy would be made known to us. We accordingly conceive of action as accomplishing some change.

This change it will be advantageous to observe in the relations which obtain between participants in action—in particular the change from non-relation to relation. Thus, for instance, given a robin and a cherry, suppose the robin eats the cherry; the act may be regarded as the instituting of a previously non-existent eater-to-food relation between the bird and the fruit.

Each particular action institutes its own particular relation. In "A struck B" I find the relation of striker to victim; in "Brown hired Johnson," that of employer to employee. Taking a hint from the suggestive suffixes occurring in "employer" and "employee," I group relations of this type—especially instructive in the study of the passive voice—as actor-to-actee relations.

To regard them thus generically is a great convenience; and thus to overlook specific character will work no harm, so long as the particular action is itself distinctly recognized. To illustrate this, an act of hiring plainly will not of itself alone develop any special form of actor-to-actee relation, save the one that I express by employer-to-employee—not the one, for instance, that I might express by murderer-to-victim. Accordingly I do not risk confusion, if, instead of regarding "hired" as expressing an action-produced relation of employer-to-employee, I regard the word as expressing an employment-produced relation of actor-to-actee.*

*In other publications I have given reasons for believing such to be the meaning of the verb, the nominative and accusative inflections of its subject and its object showing in the given illustration that relation indicated by the verb obtains between (first) Brown and (second) Johnson, thought of in that order only.

THINKING IN THE PASSIVE FORM

Its Nature

By thinking in the passive form I mean the kind of thinking which the passive voice expresses, though—as I shall later strive to show—such thinking does not always choose the passive voice for its expression. To illustrate, in the sentence "Brown employed Jones" I intend the active voice to indicate that, of two persons, one was by a given action put in that relation to the other which may described as the relation of employer to employee. On the other hand, in "Jones was employed by Brown" I might intend the passive voice to intimate that, of two persons, one was by the given action put in that relation to the other, which would be described as the relation of employee to employer.

It should be observed that every thought in the passive form is virtually tantamount to some thought in the active form. The two are mental counterparts of one occurrence—or one status. But the first and last terms of one thinking have become respectively the last and first terms of the other. Unless accordingly these terms are in relation of equivalence, the change from what may be called a proverse order of the terms to a reverse order certainly will change the form of their relation. In passing from ravine to hill-top I am conscious of what may be known as higherness; but, in returning, this will be displaced by lowerness. That is, reversal in the order of my terms entails a change from what may be called the proverse relation of higher to lower, to the reverse relation of lower to higher*. This, then, is what I more particularly mean by

* What for convenience I exhibit thus as two relations, may be rather sensed as different aspects of the same relation. Thus, whatever bulk-relation holds between for instance the unequal A and B, is obviously one only; yet the different mental transits—one from A to B, and one from B to A—develop different mind-sensations, which may be expressed, the one by $A > B$—the other by $B < A$.

thinking in the passive form: a thinking in which the order of the first and last terms is reversed—a change which brings about reversal of relation.

As said above, the passive form of thinking is substantially equivalent to *some* thinking in the active form. To illustrate, given "Brown employed Jones," if now I change to "Brown was employed by Jones," I plainly use the passive voice, and doubtless also think in a passive form; but this passive form of thought is not by any means equivalent to that expressed by "Brown employed Jones," but only to that expressed by "Jones employed Brown." On this distinction, obvious as it is, I lay some stress, because I don't believe that "Brown was employed by Jones" would ever have developed from "Brown employed Jones," but only from "Jones employed Brown;" for it is in the desire to change the form of thought, but not its substance, that I look to find the motive for the use of passive forms.

Its Motive

To illustrate, picture the catastrophe suggested by the words "The cow has scared the cook." These words express the mental counterpart of an activity in which the two participants are posed in the relation (noted just above) of actor to actee. If, with the cook—and others not a few—you think of "cow" and "terrifier" as essential synonyms, relation may be more specifically known as that of cow-to-cowed—a relation understood to hold between the implicated parties in the order mentioned.

This order, it will surely be admitted, is completely natural, especially in case I happened to see the cow and her perhaps disquieting demeanor before I saw the cook. Yet I might have seen the woman first; and I might have been profoundly moved by her dismay, before observing her disturber. Indeed, without such prior observation, merely as my fellow human being, as a member of the weaker sex, as the preparer of my food, the cook has prior claim upon my interest; and certainly, when now the first excitement of my observation yields to the

comparative calm of recollection, what I want to tell you about is less the cow and her more or less imaginary doing, than the cook and what she underwent.

I am indeed aware that such a thinking backward—so to style it—may be caused by other influences: (1) putting the first term last, (2) putting the last term first, and (3) reversal of relation, each requires the other two—that is, effects a thinking backward; and also each may have not only a positive, but also a negative occasion.

In other words, I might desire per se to use the reverse relation, or I might rather wish to avoid the proverse. I might wish to think last of the cow, or merely not to think of her first. I might dislike to think last of the cook, or I might positively wish to think of her first; and plainly any one of these likes or dislikes might induce the passive form of thinking indicated by "The cook has been scared by the cow." But on the whole, for reasons given on pages 5 and 23 the motive for the passive form of thinking seems to me, as a rule at least, to be the wish to begin with what in the active form of thinking is the final term. The very type of influence which prevents me from saying "A pin has been swallowed by the baby!" seems to me to lead me to say "The cook has been scared by the cow."

Its Frequency

Thinking in the passive form is plainly not confined to action. To illustrate, in the sentences "Roses are red" I find no hint of action. Their redness, it is true, may be regarded as resulting from a former output energy which made them red; but the sentence seems to me (by means of "are") directly to exhibit roses and what I express by "red" or "redness" in the merely existing relation of (thing or) substance-to- (its own) attribute or quality. Now, just so far as I am sure of anything, I'm sure that, instead of thinking of the roses first and later of the redness, I can think, if so I choose, of redness first, and later of the roses; and that, in so doing, I no longer experience the mind-sensation which I called the thing-to-quality

relation, but beyond a doubt the reverse relation of quality-to-thing. This last relation, notwithstanding the hasty denial of some writers (e. g. Steinthal), is without the slightest difficulty thinkable, is sometimes really thought, is sometimes even clearly expressed, as in the sentence "Redness characterizes roses."

In this connection it is interesting to observe that thought-reversal—or "conversion," if you better like the phraseology of Logic—if repeated in this case, might lead to "Roses are characterized by redness," which to me exactly paraphrases "Roses are red." So also, in its denotative aspect, "Men are animals," reversed, is "Animals include men;" and, *re*reversed, is "Men are included in (are in the species-to-genus relation with) animals," which to me exactly paraphrases denotatively the sentence "Men are animals." Or, in the connotative aspect—if you like it better—reversal of "Men are animals" develops "Animal-ness is included in man-ness," which *re*reverses into "Man-ness includes animal-ness," which to me exactly paraphrases connotatively the sentence "Men are Animals."

In reversals of this sort, however, so far as I have observed, a figurative action is imagined—as if, for instance, the redness "did something" to the roses; but, seeing no gain to be effected by examining just now the purely figurative, I confine myself so far as possible to what, with no imagining, may rank as action (always specially conceived as a relation-former), action-formed relations, and reversal of relation.

THE PASSIVE VOICE.

By this I mean a system of verbal forms which express relation the reverse of that which is expressed—or might be—by the active voice. I concede the passive rank to the homely phrase "is being loved" as cordially as to the elegant "amatur;" but I exclude the forms which are not recognized by general consent as constituting with the active forms one larger verbal system. To illustrate, in the sentence "June precedes July" the verb expresses a relation which, neglecting figurative values, may be known as that of earlier-to-later. If now I wish to substitute the passive form of thinking for the active, the required reverse relation of later-to-earlier may be expressed by "follows," as in "July follows June." But I do not plan to aggravate existing difficulties by attempting to establish "follow" as a passive of "precede."

Its Unnecessariness

By this I mean that passive verb-forms are by no means indispensable, although I recognize their great convenience.

In the first place I suppose that it is never absolutely necessary to adopt the passive form of thinking. Reviving my initial illustration, given a cannibal and a missionary, whichever eats the other, I can always think of that one first, and always sense relation of the two accordingly as that of eater-to-food. My mental operations do not seem to seriously suffer, even if the relation of food-to-eater never dawns upon my consciousness.

In the second place, although I be distinctly thinking in the passive form, as intimated under the preceding title I do not seem to absolutely need an actual passive voice for its expression. In further illustration, given what is indicated by "The box overlies the book," the positional relation of the mentioned objects plainly is that of overlier-to-overlain, or up-

per-to-lower. If now I wish to indicate the reverse relation of overlain-to-overlier, or lower-to-upper, I have only to make use of "underlies."

It is true that—thanks perhaps in part to long perversion of my brain by talk of verbs and their objects—I think, in "The box overlies the book," of the box as "doing something" to the book; and that, in "The book underlies the box," I violate this notion by thinking rather of the book as doing something to the box. However, as this notion strictly is unwarranted, and not particularly plausible, I hardly imagine that unwillingness to violate it would of itself alone prevail on language to produce the passive form "is overlain."

No doubt a careful search would bring to light a number of verbs not ranked as passive which are able to suggest relations the reverse of those expressed by certain other verbs; but I confine myself to one more illustration. If I put in a shallow pan of water a sponge that is not too dry, in a little while I find the sponge-pores occupied by water. What has happened I may indicate by saying, as I choose, "The water wet the sponge" or "The sponge absorbed the water." That is, once more a verb in the active voice ("absorbed") is merely able to perform essentially the functions of the passive, as performed for instance in "The sponge was wet by the water." The interesting difference in the meanings of "absorb" and "wet" may be however worth more careful observation.

That we make witch-work of the laws of matter in the mental picturing that language registers, I have already intimated on p. 3. In the present illustration we may catch ourselves twice over "in flagrante," one "delictum" offering too an outright contradiction to the other. I mean that both the wetting by the water and the opposite absorbing by the sponge exhibit the erroneous conception overthrown by Newton—the conception that in action things are active. Till his day we mainly doubted not that apples did their falling of themselves, without the help of gravity; and linguistically they continue still to do so. Thus, in saying that the apple fell, I mean that it performed the act of falling—caused to exist, between itself

and falling, the relation of an actor to his action—or, if you so prefer, established substance-attribute relation between itself and down-ness.

Analogously cerebrating, I imagine water in the one case as performing on the sponge the act of wetting, though if I reflect a moment, I am well enough aware that water of itself is impotent. Yet the force of habit is so strong that, if I be not roused to more than usual care, I think of wetting somewhat as the water's entering, and indeed more specially its rising up into, the sponge—a rising not so very different from a school-boy's climbing up into a tree. I feel, however, nowise so far pledged to this conception as to be at all embarrassed in adopting on occasion one absurdly opposite; for by "The sponge absorbed the water" I am sure I mean that, in its turn endowed with active powers, the sponge "drew in" or, as the etymologist might tell us, "sucked away" or, as plebeian parlance puts it, "drank" the water "up"—conceptions, all, in which I am about as near to fact as if I said the tree reached down and pulled the school-boy up into it.

The illustration emphasizes what the careful thinker often overlooks: that words are the immediate symbols not by any means of things (activities, etc.), but of ideas, which only more or less exactly are the mental counterparts of things; that sentences are symbols not by any means of facts, but of our thoughts, which only more or less exactly are the mental counterparts of facts; that not even is the this day's counterpart consistent always with the counterpart of yesterday—the self of now with the self of then. Thus, in the now considered case, the action ranks in one expression as the water's push, and in the other as the sponge's pull.

I am not however looking for linguistic trouble, having learned to be content with crude expression, and with cruder thinking and observing. It's enough for me to notice that at first the water wasn't in the sponge, and that at last it was—enough to reason that it somehow got there—enough to tell you that it did so. Any successful method satisfies me. "On parle toujours bien, quand on se fait entendre."

After all I'm half aware that I've been speaking quasi figuratively in either one of the expressions cited. Both expressions came to me as an inheritance. In each I found a mode of outer-world conceiving, adequate to phenomenon-suggestion. Whether my train (of thought) be pulled by a locomotive at one end, or pushed at the other by an elephant, I care not, so long as my train arrives in safety. Given then "The water wet the sponge," if I prefer to begin my thinking and expression of the happening with the sponge, I suppose "The sponge absorbed the water" will be felt to meet the most important needs of speech.

I suppose moreover that linguistic ingenuity may be relied upon to have been equal to emergencies in every other case in which it may have been desired to express the passive form of thinking (or a figurative, make-shift substitute)—and that, without creating passive verbal forms.

Its Convenience

This appears most clearly when comparison is made between the passive verb-forms and the verbs that might be used instead of them. Recalling substitutes already mentioned, I admit again that, given "to precede, to overlie, to wet," the corresponding passive forms "to be preceded, overlain" and "wet" are far from indispensable, because the reverse relations which the passive forms express are adequately indicated by "to follow, underlie, absorb."

Such expression is however much too wasteful of linguistic effort. To unnecessary verbal effort I am sometimes not indeed averse, provided there be not too much of it. If I wish an opposite to "merciful," I may indeed enjoy a display of lexical equipment, making use in turn of "vengeful, cruel, stern, severe, etc;" but I can't rely on each or any of these words to come to me unfailingly; and so I'm very glad to be able always to fall back on "merci*less*" or "*un*merciful." The meaning-changers, "un" and "less," since they are constantly in use, I do not easily forget; and, being too in almost every case available, I come to prize them much more highly than

the unreliable approximate equivalents of "merciless," the use of which might pose me as the master of a rich vocabulary.

Perhaps indeed we all are ostentatious; but we all presumably are also indisposed to excessive effort. Why write the figures 847 nineteen times in column, and then add them, when you reach the same result by writing once and multiplying by nineteen? Why use a different hammer for every nail you drive, when one will answer?—or lug about a set of golf sticks, just to knock the pebbles off your paths?

In passing from the active to the passive forms of thinking, language found it irksome to provide a special verb for each reverse relation. It was better, in the passive sentence, to invest each verb of active thinking with an indication that, in passive thinking, it expresses a relation the reverse of that employed in active thinking. A little variation in the costume of the active verb—a mere inflection—was enough. The policy of providing every verb of action with a help-meet to exhibit action as producer of reverse relation—the policy of doubling the number of the action verbs—was given up. The effort thus economized was ready to be spent upon the evolution of a passive voice.

If the passive has been rightly said to express relations the reverse of those expressed or expressible by the active, it is obvious that a rational effort to differentiate the passive from the active (and the different passive values, one from another) will base itself upon some study of relations both in proverse and in reverse form.

Reverse relations are moreover best perceived, in their expression by the passive voice, when juxtaposed with the relations indicated by the active voice. If the perception of these latter be complete, since every reverse has its proverse, the relation-repertory of the passive voice may be derived from that developed by the active. I begin accordingly with the active voice.

An expression in the active voice may recognize not only an action, but also an actor and a direct object—or, say, an

actee.* That is, the personnel or dramatis personae of an action will consist in full of these two elements; and, in the active form of thinking, any relation sensed between them plainly can be only the relation thus far emphasized—the relation of actor-to-(his own) actee. If now this personnel shall vary by the omission of either element, any recognized relation certainly will be a new one; for the old relation plainly cannot hold between two terms of which one is not in the mind. The possible variations in the personnel moreover will suggest the several new relations which those variations may develop.

The variant personnel may plainly be made up as follows: actor and actee may both be present; the actor may disappear; the actee may disappear; both actor and actee may disappear. The action will not be omitted; for without it there will not be any action-formed relation; no other relation is considered; and without relation there will be no proper thought† and also no expression.

In the passive form of thinking, corresponding variations may be looked for. In expression by the passive voice the actee of the active is however subject, while the actor is known as the agent. These familiar designations I will use to make some following sub-titles clear, as now I reach the nucleary topic of investigation, indicated by my leading title, i. e. "The Relations Expressed by the Passive Voice." Accordingly,

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* The indirect object I omit, and also other more or less immediate participants in action, as they seem to me to throw no valuable light on the relations in which actor, action and actee appear.

† The mere co-thinking of e. g. the missionary and the cannibal is not at least such thought as language makes the effort to express.

THE RELATION WHICH THE PASSIVE VOICE EXPRESSES

Case (1) When Used With Both a Subject and an "Agent"

MEANS OF INDICATING THE RELATION

As intimated on p. 13, for every variation in the action-personnel I look to find a corresponding variation in the recognized relation formed by action; and for each relational variety no doubt a special means of expression might have been adopted. But the particular action-personnel in actual practice will be found to insure in the active voice particular relation (insuring it for instance, when the actor disappears, as that of action to actee) devolving on the passive voice the duty only of determining relation as reverse—e. g. relation not of action to actee, but of actee to action. That is, the function of the passive will be sensed as not the naming of *particular* reverse relation, but the naming of a *whatsoever-it-may-be* reverse relation, the reverse of the relation indicated—or which *might* be indicated—by the corresponding active voice. Accordingly the symbolizing policy adopted when the passive is attended by actee and actor both—or, say, by subject and by agent—is available still, though one or even both of them withdraw. Examination of this policy is not then special to Case (1), and might begin and end before examination of Case (1) and all the other cases, were it not that data necessary to the two examinations interlock. Accordingly I somewhat dislocate the sequence of my reasonings, reviewing first the merely possible means of expressing a reverse relation, hoping this review may disembarrass me of preconceptions harmful to intelligent perception of the means in fact employed—passing next to influences tending to evolve these actual means, and following their changes both in form and meaning—trusting better thus to understand their ultimately reached significance.

Possible means

On page 8–9 I outlined one of these, which now I will examine somewhat more completely—thus: Suppose an action which develops a particular relation; and suppose I wish to indicate reverse relation. I may replace original action by another action which establishes relation more or less exactly the reverse of that established by the original action. For instance, given "The box overlies the book" expressing (figuratively) the action-established relation of upper-to-lower, the reverse relation of lower-to-upper is established by the action named in "The book underlies the box." The verb-form "underlies" accordingly may be compelled to carry out essentially that purpose of the passive voice which is distinctly indicated in "The book is overlain by the box."

Now the tendency of language usage is notorious: to take an ell when given an inch. If "under" in the present case successfully suggests reverse relation, why not use it for suggesting all reverse relations? What is sauce for the goose is sauce for the gander. As a virtual passive for "The boy has climbed the tree," why not "The tree has underclimbed the boy?" Why not moreover let the usual erosive influences have their way? These would in the course of time reduce the "under," say to "u"—a prefix with the power always to suggest reverse relation. A verb attended by this prefix might be ranked essentially as the inflectional offspring of the active voice—as legitimately passive.

Of such offspring it might be expected that linguistic ingenuity would be prolific—capable of reaching more than one solution of the passive problem. Other prepositions (adverbs) —e. g. "counter," "anti," "re" and many more—effect required suggestion of reverseness quite as plainly and with larger range of applicability than "under". Moreover, quite as truly as these prepositions, readjustments in the structure of the verbal form itself are eminently capable of intimating the required readjusted thinking. A shift of the syllabic accent from the verb's beginning to its end, or vice versa—in other words the

transposition of successive sound-intensities from strong and weak to weak and strong—affords a hint of changed relation quite as plain as language often condescends to give for any purpose; and interchange of pitch between the verbal front and rear, or of the quality of consonants or vowels would be hardly less effective.

To illustrate these three possibilities in turn, of "corréct" the passive might be "córrect"; of "(He) attacked (me)" the passive might be "(I) attacked (him)*". Of "Cŏnfūse" the passive might be "Cōnfŭse." Of "Push" the passive might be "Fus," such aspiration-shifting being quite a favorite in older languages.

The interchange of syllables or single sounds, and other possible means of indicating the reversal of relation I neglect, except the simplest and most natural of all—inversion. Of this in mathematical notation everyone makes use. Given thought expressed by $A > B$, if now I begin my thought with B, I indicate the further, indispensable reversal of relation by replacing $>$ by $<$. That is, I reverse or invert the relation sign—or, so to speak, I spell the inequality symbol backward. And so, instead of saying "The burglars daily rob our houses," if I wished to start with "houses," not however changing the essential value of my statement, I might indicate the further, indispensable reversal of relation by the simple change of "rob" to "bor," as in "Our houses bor the burglars,"—that is, in this case also, by inverting the relation sign.

The fact, however, that verbs are for the most part ill-adapted to a backward utterance or spelling, would restrict the availability of this mode of symbolizing. As moreover this and other possible modes of symbolizing are, so far as I have noticed, either possible only, or at most occasional, I neglect them all in favor of the constantly occurring, actual means.

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* (This latter uttered with the well-known Anglo-Irish dip and lift).

Adopted Means—figurative

While the examined possible means of indicating the reverse relations some of them are rather indirect, the chosen means, so far as I have noted them, are vastly more so, being figurative in a most remarkable degree. I take up first

A—THE FIGURE OF SELF-INFLICTION

Difficulties of expressing passive thought before a passive voice existed

It will, I think, be helpful to appreciation of the mental operation indicated by this title, to suppose ourselves in the predicament of one who does not have a passive voice at his disposal, but who, thinking of an action, has begun his thought —and therefore wishes to begin expression also—with the object of the action, say with the actee—a change of order which, as argued on pp. 4–5, necessitates (except as indicated) use of a relation the reverse of that experienced in thought beginning with the actor.

The history of speech establishes that such a one could not create the passive voice, nor could he use it, even were it offered him; for he has rarely sensed reverse relation, and more rarely still has sensed it as a whatsoever-it-may-be relation, the reverse of the relation indicated by the active voice. Moreover such a one, however he express himself, in order to be understood will of necessity confine himself to words and combinations that as a rule already are familiar to others; any deviation in a meaning or a syntax must be small, must bring the hearer very close to where he was intended to arrive, must leave him where he easily can see from where he stands to where the speaker meant he should be standing. That is, exact expression failing, a somewhat riddle-like expression may be substituted, the linguistic law of substitution being that the riddle must be guessable—and guessed.

Their alleviation

That we can guess successfully is owing first of all to this, that in the main your repertory of ideas matches mine. As compared with those of Eskimo and Zulu, our experiences closely tally. My observations, analyzings, classifyings have arranged on my idea-shelves a stock that only negligibly differs from your own—an indispensable preliminary to all thought-communication, seemingly ignored by those who clamor for exchange of signals with our Martian neighbors. Thus equipped for thought-communication, and made skillful by long practice, we are guided by the common momentary situation, context, inference, association, aspiration, tendency to figurative thinking—so far guided that we keep together in our thinking, though occasionally the intended meaning of a word or phrase be not exactly that with which we are familiar.

Meaning-change has also some analogy with physical momentum. I mean that, when the meaning of a word has made a series of advances all in one direction, the next advance will be expected in the same direction. This principle will later be applied to our conception of participants in action. In the meantime that conception may with some advantage be extended.

For a moment in particular I wish to go beyond the usual conception of an action as implying merely an associated actor and, it may be, an actee direct or indirect. By way of illustration let it be supposed that Brown has rightly aimed his duly loaded shotgun at a partridge. As his finger pulls, the bird comes down—occurrences which both are indicated by "He (the actor) shot (the action) the partridge (the actee)."

Examining now with somewhat more than usual care, I realize that the effects of Brown's activity are multiple. With objects both direct and indirect, according to your point of view—with datives ethical or of advantage, disadvantage, interest—with every kind there is—my illustration will be found to be abundantly provided. (May I only make no blunder as to which one ought to rank as which!) For obviously the

shooter did not shoot the bird alone; he also shot the gun, the powder and the shot, a streak of flame, a disagreeable noise and, by recoil, perhaps a bruise upon his shoulder. He shot the partridge *for* his sister, *for* her supper, but unluckily *to* pieces. Being on the spot, I take my own association with the action seriously. In speech indeed we all reveal an adequate appreciation of the "quorum pars magna fui." Hence expressions in Elizabethan parlance such as "Perkins pulls *me* (the dative of the bystander? or, say, remote associate?) a shilling out of his pocket and gives it to a beggar." Analogously, then, "Brown shot *me* a partridge for his sister." Indeed—politeness recommends no less—"He shot *him* a partridge for his sister;" and, if politeness reach the Spanish multiplicity, "He shot *her* a partridge for his sister."

Suppose now I examine no less closely into what, it seems to me, occasions action (pp. 9–10), aids it or abets it. Not to speak of motor nerves and muscles easy to dissociate from mental self, I notice that the shooter's finger made a quite important contribution to the shooting. The trigger also was a far from negligible factor—and the hammer and the spring whose pent up energy, once liberated, wielded it to strike the detonating blow. Indeed I'm not so sure that after all the shooter shot the gun at the partridge. It may be rather that he shot the partridge with the gun. Perhaps the latter as a whole and in its parts, and even in its contents, should be sensed as implicated in the action rather as its co-producer than as wrought-upon by it. Of this at least I'm well assured, that, if we so are minded, we shall think of action as effected not alone by actors, but additionally by co-actors or sub-actors—say by coadjutors. I am ready to conceive of action on the one hand as divergent in its influence, and on the other as resultant of a multiple convergence. What we recognize as objects more or less distinctly indirect, are matched by what we know as means or instrument, concomitant, et cetera. It suits me at this moment best to think of them as subjects more or less—now more, now less—direct or indirect, suggesting thus a sort of instability in them; for this, it seems to me, was basal in the evolution of the passive voice.

The very multiplicity of action details thus facilitates linguistic dealing with them. To sense them accurately is impossible. Bewildered by their crowding, mind renounces hard and fast determination of their several implications. Rigidity of mental total yields to flexibility. So conceiving them, I can for instance think of self and shot-gun as approximately partners, either one of whom may at a given moment rank according to convenience as a senior or a junior partner—even as a silent partner—even lending nothing to the enterprise beyond his name. I am ready then to think of self not only as co-active with the weapon in the shooting, but as also far less genuinely active—or as, say, *sub-active*—in a shooting pictured as effected by the weapon. In general, the actor may be posed as coadjutor.

Coming now to what in speaking of the changes in the meaning of a word I called momentum, I observe that, speaking of the Boston-Portland boat, if I should say "She runs by the shore," the preposition would suggest that course of boat, and trend of shore, are virtually parallel. If now I say "She runs by schedule," this equivalence of physical direction is advanced to harmony, agreement, almost to community of purpose—which may be expressed exactly by "in accordance with." Still further, in "The clerk computed interest by bankers' tables," "by" not only has this meaning, but gives also hint of further meaning easier to discover in "She runs by sails—or paddle-wheels"—in which the prepositional suggestion has once more advanced, from the idea of harmony to that of help; for "by" means doubtless "with the aid of"—not however "by the unassisted act of," wheels or canvas being plainly impotent without co-operation—that of energy or whatsoever we may think of as providing energy. It seems to me indeed, not only that we apprehend the situation thus, but also that in actual practice we construct our mental picture of the situation quite accordantly. "By" then contemplates in this case a contributory, partial agency. If now the meaning of the preposition is still further to advance, it seems to me we could if necessary guess approximately the direction and amount of the progres-

sion. From contributory, partial agency the next step—or the next to that—will naturally be to agency complete, exclusive, self-sufficient. This indeed appears to me to be expressed, if now I say "She runs by steam," in which the figurative "runs" is felt to differ very little in its ultimate suggestion from "is run" or "is propelled."

It appears accordingly that, if in evolution of the passive it at any time be necessary for the preposition "by" to pass from the idea of aid to that of agency, the change will easily be made and easily understood. With this in mind, and with ideas of action now more flexible (see pp. 19–20), I turn to figurative self-infliction of an action, noting that, although it is per se absurd, it cannot therefore fairly be regarded as implausible; for action surely is conceived in other figures more absurd, yet actually formed beyond a peradventure. Personally, at least, when once I am accustomed to the Spanish thought-form—eminently to be envied—indicated by "The letter you requested me to mail has disremembered (or forgot) itself for me," I'm very ready to accept as actually formed the mental pictures of another, even though I don't belong to his particular school of figurative art.

A priori probability that the actee would at the first be pictured as inflicting action on itself, assisted by the actor

That action would be figuratively conceived as self-inflicted is suggested when it is remembered that, so long as a passive voice has not yet been developed, what the speaker regularly thinks of first—and therefore regularly mentions first in all linguistic thinking of an action—is what momentarily at least is posed as actor. Thus, even in "Brown received a blow from Robinson," the syntax of both thought and sentence poses Brown as, in a figurative sense, the actor, i. e. "doing" the receiving.

It is true that now and then a word forsakes its proper place in the sentential line. For instance, thinking of St. George's killing of the dragon, I may say, poetically or affectedly, "St. George the dragon slew," "The dragon St. George slew," or even "The dragon slew St. George." So too indeed, instead

of "slew," I may write "elws." But, as I elsewhere sought to show (Hybrids p. 131), the hearer and the speaker must reset in mind all sentences that thus are out of joint, before he can correctly sense intended meaning. Apparently there is accordingly no genuine exception to this law: What the speaker thinks of as the actor, he begins with in the active sentence (i. e. one whose verb is in the active voice).

If accordingly the ante-passive language-user, thinking of a given act and its participants—for instance those exhibited in "Robinson struck Brown"— begins with Brown, the mental habit formed in long employment of the active voice develops a well-nigh insuperable tendency to think of Brown in the usual way as somehow *still the actor* in the given action. That is, the law of action-thinking that I formulated just above, is operative in its converse aspect. What the speaker begins with in the active sentence he will think of as the actor, *even though it be the actual actee.*

Suppose I start accordingly with Brown (the actual actee) conceived, however, as the actor, and continue with the act of striking; the place of the actee (or person struck) invites an occupant. If Brown is somehow actor, Robinson might be expected somehow correspondingly to figure as actee; and, with all its violence, an imaging of just this sort sometimes occurs, although, so far as I have noticed, only farcically, as in "Brown struck Robinson on the fist with his eye." Except, however, when expression strains at wit, the sentence "Brown struck Robinson" can be regarded as intelligible, only in the flattest contradiction of the given fact. Furthermore, to say that Brown struck Smith or Jones or anyone thus far unmentioned, is irrelevant to fact. On the other hand, the figurative statement that he struck himself, as I shall argue, can be reconciled with fact—by piecing out—and even can be made intelligible as a statement of the fact. To give however to the evolution of so figurative an expression any plausibility, I need another illustration—one which virtually will compel the mind to the complete conception of a figurative self-infliction. Such an illustration waits me ready-made—achieved by one of those un-

tutored minds in which linguistic genius is embarrassed very little by conventionality. The illustration presupposes that a snake has bitten Brown. I further stipulate that it was in the back. The illustration thus protected I exploit as follows:

Desiring to tell you what has happened, I of course can realize my purpose by "A snake bit Brown, etc." But I don't want to begin with the snake. Brown interests me more—and first. He is the superior creature. He was the "under-dog." He is a friend of mine. The snake I never even saw. I want to begin with Brown.

Yielding to the force of habit—following the mental line of least resistance—since I thus begin with Brown, I also pose him as the actor (see p. 22). I picture him as a doer of the biting; and I like the picture. It poses Man as arbiter of his destiny—no victim of a loathsome reptile.

But the picture does not yet inform you that the biting anywise affected Brown. I must extend the picture, even though absurdly. Accordingly "Brown bit himself."

This statement might be more precisely true to fact; but that is unimportant. So long as I successfully inform you that a given injury befell my friend, the question who or what inflicted it may rank with you as quite subordinate. For myself, I like my way of putting matters very much; and, "saving" thus "the face" of him who really was a victim, by this feigning that what happened to him he achieved himself—"on purpose"—I am hardly guilty of an innovation. For it is in speech a deferential habit—most inveterate—to attribute to another an autonomy contrasting violently with my own subjection to my destiny—a habit still detectable in "I shall, thou wilt, he will"—that usual linguistic exaltation of the other, often indicated only by a converse self-abasement, direct in the Japanese self-designation as "your stupid younger brother," indirect in the Chinese "that dirty woman, my wife."* My deviation from the truth, in telling so far what has happened, is accordingly not only unimportant, but effectively supported by analogy.

* These hearsay phrases, quite unverified, I offer for their illustrative value only.

But I have defrauded you of details. To indemnify you, I extend my statement, adding "in the back."

This however brings me to a halt. Brown couldn't bite himself in the back. Besides, it isn't fair to you—and doesn't satisfy my love of telling all I know—to leave the snake out of my story.

Accordingly, beside the actually quite inert and purely honorary actor Brown, I put the really active snake, the bona fide, genuine actor. To the latter I assign the imaginary (figurative) role of coadjutor or, if you so like it better, subject indirect, for which no doubt a sentence adequately fitted out may find a place as easily as for an object indirect (see p. 19–20), or any of the many effluents or influents or affluents or confluents which action, thought of as a complex stream, may call upon the sentence to express.

This coadjutor (means or instrument) I might naturally join with the figurative actor Brown, as if the latter and the snake on equal terms cooperated to effect the biting. For "Brown *with*" (the snake) is almost, if not quite, synonymous with "Brown *and*," as is strongly hinted by the popular "Brown is good friends with me," in which an "is," unduly (?) influenced by "Brown," and order (thus far unreformed) are all perhaps that hinder this interpretation: "Brown with me—i. e. we two—are good friends."

In my liguistic thinking I prefer however to associate the reptile *with the action,* using for this purpose "with" as synonym for "by," and meaning "through the agency of."* Accordingly the sentence due to no invention of my own, but to a genius whose linguistic bow I cannot bend, "He bit himself in the back with (or by) a snake"—a sentence which, as well as the also far from original "He kicked himself on the head with a horse," will bear comparison, though far less ostentatious, with "durch jemand in Erfahrung (zu) bringen," which to me means little more than "be informed" (by some one).

* That, in my association of the snake (the agent) with the biting rather than with Brown, at least I am not guilty of a mental innovation, is apparent in the light afforded by for instance "Itur ab omnibus" in which only with the action (going) can the agent be associated.

It appears accordingly that an imaginary, figurative self-inflicted action may, in spite of all its clumsiness, be utilized successfully in so transposing thought- and sentence-order, that the object (or actee) is given what at first would seem to be exclusively the actor's place, and vice versa.

Probability that the actee and actor would be sensed in new relations

What has thus far been accomplished plainly is but the initial step in the evolution of the passive voice. Further steps may be expected to establish members of the trio (actor, action and actee) in new relations different from those expressed by the active voice. In the search for these another illustration will be more convenient—one in which relations will be understood more easily. Accordingly, "My apples eat themselves by (the aid of) the boys."

This illustration seems to me, so far as it goes, identical in structure of both thought and sentence with my last, and also in its use of figurative self-infliction. That is, although in fact the boys eat the apples, I imagine the apples to "do" the eating "to themselves" with some assistance from the boys. That is again, the apples are conceived as in the eater-to-food relation—a particular actor-to-actee relation—with themselves.

Now if that relation shall be superseded, in the first place it must be ignored. "It is well to be off with the old love before you are on with the new." So long as mind is occupied by what the symbol $>$ expresses, I see little room in mind for that which is expressed by $<$. Furthermore I see no probability that a relation be ignored, so long as what expresses it is unimpaired. I look accordingly for some impairment of the expression "eat themselves."

By way of leading up to this, suppose my illustration to be typical—that "eat themselves" is regularly used whenever we today would say "are eaten"—that the case of "bit himself" is quite analogous—that generally this reflexive usage holds the place that later will be yielded to a passive clearly recognized as such—and that the change-resisting influence of printing

and habitual writing is not yet in operation. In speech-development it is an a priori certainty that under such conditions verb and ever-present reflexive object coalesce, wear down and come to be regarded as a mere inflectional variant of the verb—that the like occur in other persons, numbers, modes and tenses—that a full reflexive system of inflections, a reflexive conjugation, be established.

Thus far I have merely been reciting the initial chapter in the history of the so-called "middle voice"—a species of reflexive conjugation which has often reached a strictly passive meaning. I find the major interest in the succeeding chapter. It opens with "themselves"—the once effective symbol of reflexive object or actee—so much impaired as to be quite unable longer to effect its (earlier) purpose. That is, although the specially inflected middle voice still indicates a reflex action, its distinguishing inflection does not symbolize with any certainty the reflex object.

As a rule, in such conditions, what no longer is expressed distinctly, is in time forgotten. In "The apples eat themselves," then, let "themselves," surviving only in some fragmentary form—in the present case for instance *th*(emselves)—suggest no longer any element of thought; but let it be remembered still that any verb inflected with that form—say "eat*th*," analogous to "eduntur" with a middle meaning only—is used of only such activity as exercises its effect upon the subject—in the present case the apples.

With the mental disappearance of "themselves," the relation—purely figurative—which at first was recognized between the apples and themselves, is also necessarily in time forgotten. That is, the apples and themselves are now no longer even figuratively perceived in the eater-to-food relation. But the apples must be sensed in some relation; for otherwise they could not enter into any thought intended. Though sensed in detail, apples, boys and eating still are recognized as the constituents of a unit. It must assuredly be felt that all are in some way bound together by relation, though momentarily there be no clear conceiving what particular relation it may be. Indeed,

about all that I further seem to even vaguely recognize at first, is that in what occurs the apples somehow get the worst of it.

In postulating such a state of mind I am emboldened by the recollection of some English friends whose mental operations were distinguished in their talk by greater strength than nimbleness. For instance, failing often for a moment, like the rest of us, to marshall with success the many details of a more than ordinarily involved assertion, these gentlemen were usually quite unable to reorganize their scattered forces. To coin an illustration, "The more you're sure that it'll never do to own up that you can't do what's expected of you, all the more—I would say, all the less—I mean—*you know*" or "don't you know?" That is, the speaker knows, although he cannot at the moment tell; and he is sure the hearer knows what is not told. The ground of this assurance seems to be the presence in both minds of a distinctly indicated situation, the embarrassment attending which is a familiar corollary. What is absolutely indispensable to thought-inception, is successfully exhibited. Thought-completion is entrusted to the hearer with no fear that he will not accomplish it. One might express the speaker's estimate of what he has in mind by "Somehow it's all right, although I don't see just exactly how."

Such a status seems for a while to prevail in the minds of all who use a given language, when, as happens with some frequency, the thought conveyed by this or that expression having been torn down, the old materials have not yet been put together in a second mental structure. Meantime in the mind there lie about disjoined masses of thought-masonry in much disorder—not too much; for, if there were too much—if the intended structure could not be approximately recognized—materials surely soon would cease to cumber mind, and their expression would no longer be attempted.

The inconvenience of disorder, keenly felt, may be supposed to stimulate the mind to orderly thinking—to excite an effort to rejoin, arrange, reorganize disorganized materials of thought. Now organization of thought-materials is to me the recognition of relations that obtain between them. Supposing, as I do,

that the necessity of such relations never ceases to be strongly felt—though far from clearly understood—I almost find the mental eye perceiving dimly the relation needed in my illustration. More pictorially speaking, I observe amid the mass of gathered thought-materials, a void, whose surfaces are fixed by its environment—not merely a place for a needed idea, but a place with contours adequately definite; and these are, as it seems to me, a partial revelation of what is to fill that void.

In this connection I recall a packing of my trunk, so complicated and absorbing that I found, on waking from the sleep for which I left it, that I had been dreaming of it at some length and to some purpose, putting in together satisfactorily books and boxes that had previously been too much for me. The new arrangement I began as soon as possible to carry out according to a mental diagram of all the several objects in their places—all but one; for as to that one—now that I was wide-awake—I could not remember what or where it was. Even of its attributes the only ones I could recall were size and shape, initially established by the place which in my dream it had to fill. Of its color, its material, specific gravity or use, I had not the faintest notion. Yet, stimulated and directed only by remembered size and shape, I finally recalled, recovered and successfully adjusted it among its waiting neighbors.

The new relation that should have been found

Somewhat similarly guided, one who was puzzled much, but also stimulated by "My apples eat*th*(emselves) by (the aid of) the boys," might it seems to me, discover the relation that obtains between "My apples" and "the boys"—a relation certainly that ought to be discovered, as I shall a moment later indicate. I do not positively say however that it ever was discovered; for, although presumable, discovery has left no record of which thus far I have information.

Yet, for a moment, I prefer to reason on precisely as if the sought relation, being found, had been adopted as the meaning of the verb, thenceforward genuinely passive; for a measure of familiarity with that relation, as it seems to me, is vital

to the full appreciation of the others which have actually been discovered and adopted, now the one and now the other, as the meanings of the passive voice.

It will in time, I think, appear distinctly that the evolution of the passive meaning was diverted from its natural, rational course. My reasoning will accordingly endeavor to establish first the rational, and then the (commonly accepted, current) actual passive meaning. To reach the latter, I shall analyze the eating-formed relation that obtains e. g. between the apples and the boys of my illustration into (1) relation between the apples and the eating, and (2) relation between the eating and the boys—each one of which relations I shall offer on occasion as perhaps the meaning of the passive voice; but on this occasion neither seems to me to be the one I really care to find.

Relation (2), which finds expression in the preposition "by," is ipso facto of presumably a secondary interest; for, so far as I have noted up to date, the preposition never names a dominant relation, which to me appears to be the reason why we cannot turn a preposition into an assertive verb—the namer of a dominant relation—though perhaps all prepositions can be paraphrased by unassertative verbal forms.* Thus, for instance, "A woman between her husband and her son" declines to be made over into "A woman who betwee*ned* the two," the coined verb impressing one as more than merely a neologism.

Moreover, granted that my apples have been eaten, it's to me a minor matter who has eaten them, or what relation holds between the eating and whoever it may be. I cannot rank relation, then, between the eating and the boys as what I'm mainly anxious to discover.

As to relation (1), although of greater interest than (2), it is hardly what you would expect me first of all to look for—is accordingly, as well as (2), of secondary interest. In the doubtless prior, long familiar active voice, "The boys eat my apples" tells you what relation I experience in thinking from the boys to the apples—that of *actor* and *actee*. When accordingly,

* E. g "with" may be replaced by "accompanying," "after" by "following," etc.

instead of thinking in that order, I reverse my thinking and begin with apples, I am naturally looking for reverse relation to obtain between the apples and the boys—between *actee* and *actor*. But, previous to the evolution of the passive, I assume that I had never sensed relation of this sort. I couldn't even try to formulate it; for it wasn't even part of my idea-repertory. Yet in saying that the apples ate themselves, I thoroughly appreciated that my mode of thinking was a make-shift. If now I merely say the apples are in this or that relation with the eating, I shall hardly be much better satisfied. What I want to tell—and therefore first of all to find—is the relation that obtains between the apples and the boys.

Moreover, if my statement is to be complete, this far from satisfactory relation between the apples and the eating must be supplemented by relation between the eating and the boys; and mentally to picture first the one and then the other costs me a superfluous and irksome effort. Also therefore for that reason, rather than for instance say "The apples were affected by an eating which itself was furthermore effected by the boys" (or an equivalent thereof), I much prefer to tell you briefly what relation was, by eating, formed between the apples and the boys.

Started thus upon the search, and guided by the facts, it seems to me that sooner or later one is sure to find the sought relation. To recognize it, one needs only, as it seems to me, to give himself completely to the situation's influence upon his mind—an influence which I shall understand most easily if, in approaching it, I start with a more simple illustration.

Accordingly, imprimis I observe that, as I walk from hill to valley, I experience the physical sensation namable as that of going down or down-ness; and, if I merely pass in thought from hill to valley, I experience the mind-sensation namable as lowerness or—more distinctly—as relation of the lower to the higher.* If I now reverse the walk, the physical sensation is reversed for me without cooperation or exertion of my mind;

* Why not of the higher to the lower, is a far from easy question, worthy of a specially attempted answer in another publication.

what I may call the universe of nerve instructs me. Also, even if what I reverse is mental passage, the required reversal of the mind-senation calls at most for little mental effort. The universe of space is this time my instructor. If now I pass, in thought of eating, from the actor to the object, I perceive without a struggle the relation of eater to food. This relation is no doubt a trifle more obscure than those of space; but, on the other hand, I have the vast advantage now of being taught by that most stimulating of instructors—the universe of action. "Things in motion more do catch the eye than what not stirs." Accordingly, if now, conversely, in a teachable state of mind, I often pass, in thought of eating, from actee (object) to actor, some day, in some brighter mental moment, as it seems to me I certainly shall hear and understand the great instructor: I shall, at first but dimly, but with growing clearness, sense the new relation of food to its own eater.

The situation, as I apprehend it, may be indicated by a tabulation of ideas thus:

$$\left.\begin{matrix}\text{Apples}\\ \text{known to play the part}\\ \text{of food}\end{matrix}\right\} - \left\{\begin{matrix}\text{some}\\ \text{relation}\end{matrix}\right\} - \left\{\begin{matrix}\text{Boys}\\ \text{known to play the part}\\ \text{of eater}\end{matrix}\right.$$

In view of fact the following relations are untenable:

that of eater to food,
that of eater to eating,
that of eating to food.

Indeed, the form of the reflexive phrase or verb (e. g. eduntur), so different from that employed to express the above relations, points distinctly to a different relation.

In view of mental tendencies discussed on pp. 29–30, the following relations are of secondary interest:

that of food to eating,
that of eating to eater.

The one remaining* tenable relation not of secondary interest is that of food-to-eater.

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* It seems unnecessary to develop here relations thinkable between co-actors, co-actees, actor (or action) and an indirect actee, etc., since the illustration has no room for them.

To prepare the way for the perception of this new relation, I have argued that relation at the first expressed in "Apples eat themselves"—relation purely figurative—was forgotten. I must imagine, further, the relation which at first the preposition "by" expressed, to have been forgotten also. That is, I think of, say, "eduntur-ab" as virtually but a single word, the preposition ranking merely as a supplementary element of passive inflection, which has still maintained its isolation. In other words while "edunt" names, as the relation caused by eating, that of eater to food, I am thinking of "eduntur-ab" as naming a reverse relation—that of food to eater.

This conception of the passive meaning can be made more tangible in English, though unfortunately figurative self-infliction is too unfamiliar in our language, to be utilized in illustration. Accordingly I look for aid to the regularly factorized "are eaten by," but write it as a single word in the remodeled illustration: "My apples areeatenby the boys."

As quasi precedent for such an innovation, I observe that he who stigmatizes "to repeatedly examine" as a "split infinitive" may well enough regard "are (often) eaten (after dark) by" as the analogously doubly split reverse of "eat," and recognize in the unjoined "are eaten by" a unit quite as genuine as the equally unjoined "to examine." That so indeed it has been recognized by many, is suggested by their marked analogous unwillingness to break the contiguity of verb and preposition. To illustrate, the prescribed "The brute by whom I was insulted" is with much persistency displaced by "The brute whom I was insulted by"—which after all is not by half so bad as German juggling with the separable preposition. Indeed that little but unruly member of the body sentential quite ignores the effort to control it, as is doubly noticeable in "The man (whom) she can't appear on the street without being spoken to by" and trebly in "The stick that I was struck at with by a tramp."

Nor is it prepositions only, that in such a case are lawless. Almost one might say that with the passive "all things are possible." If in "He was given-a-cane-to" and the even more absurd

"He was made-a-present-of-a-cane" the hyphenated words are felt to operate essentially as one—as strongly hinted by the would-be humorous equivalent "He was caned," and by the far from would-be humorous academic "was certificated" and the journalistic "circularized"—they seem to countenance my sensing of "are eaten by" as also virtually but a single word. This headline also, taken from a local daily, "JOHN DOE'S WHEREABOUTS WOULD LIKE TO BE KNOWN BY HIS WIFE," which seems to be intended as a passive paraphrase of "John Doe's wife would like to know his whereabouts," suggests that in the active voice "would-like-to-know" was fused in mind—a necessary preparation for the passive, also fused, "would-like-to-be-known."*

Choice of "cases" for related terms

This I can most advantageously examine after comment on the use of cases with the active voice, recalling that the case-sign of its subject—formerly a word complete, i. e. the nominative ending "s"—at first meant "always very *active;*" later, "active in the action momentarily considered"—ergo *actor;* last of all, accordingly, "first thought of" in the mental operation which is indicated by the active voice—or even also by the passive voice—i. e. *first term* or *subject,*† and that by no means always in an action, e. g. "Brown is ill."

The accusative might have reached a corresponding function,

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* It was not apparently appreciated that in passive thinking there was no excuse for meddling with the "knowing." In a passive sentence rightly formed "to know"—the nucleary object of the active sentence, used as subject of the passive—would not suffer change; accordingly, "To know his (John Doe's) whereabouts would be liked by John Doe's (his) wife."

† The nominative inflection of the noun in predicate position, though by no means rational, is thinkable as imitating the inflection of the adjective, which as an adjunct takes that case to show association with the nominative subject, and retains it rather naturally in the predicate position. I imagine it however as originating rather in the sentence which may be reversed without essential change in the relation indicated; e. g. "The King (of England) is (identical with) the Emperor (of India)"—a sentence of which either end, canoe-like, is prepared to lead. (See further p. 36.)

and with great advantage. In doing so its case-sign needed not to have been in former times a word complete, as was the nominative "s;" its meaning needed not to have been "always very *in*active." Enough that with the active voice, when both a first term and a last term are exhibited, the accusative was plainly felt to indicate what "suffers" or endures or is affected (or effected) by the action. The one that suffers is presumably "inactive in the action momentarily considered"—certainly is the actee. The accusative, in naming the actee, exactly matched the nominative in the latter's second stage of evolution into namer of the actor.

But while the nominative case advanced to an almost exclusive indication of the starting point in thought—that is, the first term—the accusative apparently made no advance. What indeed it named was plainly in the active voice not only the actee, but also quite as plainly the last term. But, so far as I have learned, the latter naming was not recognized. While accordingly the nominative had become the sign of a particular thought-membership (i. e. as first term), the accusative remained the sign of a particular action-implication (i. e. as actee, or that which suffers)—one of those anomalies which language offers in bewildering abundance—one which might have been avoided, had linguistic evolution carried (1) the accusative a little further or (2) the nominative not so far. Thus (2) if with the active voice the nominative had developed only to the point of standing for the actor—the accusative however having come to stand for the actee—the passive voice would rationally have exhibited its *subject* (the actee) in the accusative,* and put the "agent" (actor) in the nominative—with, of course, no preposition.

Or (1) if in association with the active voice the accusative had, like the nominative, taken one more step and reached the point of indicating only last-term membership of thought, the passive might have rationally duplicated the procedure of

* This, indeed, unless my information be at fault, has really been the practice of one language, demonstrating that "there are" in speech as well as other acts "more ways than one to skin a cat."

the active, putting—as the passive does in fact—its first term (subject, the actee) in the nominative, and—as it does not in fact—its last term (agent, actor) in the accusative—again without a preposition.

But evolution of this sort was barred by the tenacity with which the accusative was held to indicate what suffers action—not what is last term in thought. This old conception of accusative function was continued naturally and without disaster even when the verb expressed an action altogether figurative, as in "Sight requires" or "demands an eye to see with," which I sense as merely figurative paraphrasing of "No seeing can occur without an eye" or "Eyes are indispensable to seeing." But the old conception was continued further quite unnaturally and disastrously. Actual and figurative actions so beset the mind that they produce a habit which we follow in their absence. When the verb, although it names no action, is attended by a first term and a last, we often still proceed as if there were an action— e. g. in "A equals B" (Conf. exceeds, outweighs, overlies, antedates, etc.,) in which a well inflected language would exhibit B as object of the verb.

But in "equaling" there plainly is no genuine action. Also any spurious action—any unreal "affecting"—any "suffering the action"—is rather taken for granted than distinctly even imagined. Habit seems to be what leads to the continued use of the accusative as namer of what suffers. As habit strengthens, any possibility of sensing the accusative as used or usable for any other purpose weakens; and when action ceases to be even taken for granted, the possibility of using the accusative inflection as a sign of last-term membership in thought is practically certain to be overlooked.

The cessation comes abruptly—when for instance bulk-equivalence—or, say, a single, incomplete identity of e. g. A and B—is superseded in the mind by multiple, complete identity. If this last identity comprises, as it might, a score of single ones, whatever rationality there may have been in using the accusative with *one* identity would seem to be increased not less than twenty-fold; and yet in "A is B" which indicates complete iden-

tity of A and B, we do not put our B in the accusative.* Suddenly—I've no suspicion why—we lose all thought of action. A no longer is conceived as "doing anything" to B. B no longer is conceived as suffering "a doing." Since we then are quite unable to conceive accusative inflection as the sign that an idea is merely not the first term in our thinking but the last—since we think of such inflection only as the sign of "action-suffering"—we feel that, in the absence of that suffering, we must abandon that inflection. Why, of all the other several inflections, one appeals to us and not another, it is hardly necessary to examine. Unluckily we violate the uniformity of nominative function as the sign of first term, blundering into the adoption of the nominative case for B, the *last* term.

Conservatism won the day. Entrenched in the inveterate conception of accusative inflection as exclusively the sign of "action-suffering," it held its own against the advance of those who doubtless strove for the conception of accusative inflection as the sign of a last term. Unsupported by sufficient knowledge of accusative history, I should hesitate to say that any "doubtless strove" for the latter conception, were it not that to this day it has its numerous and strenuous supporters; unceasingly the instinct of the laity protests against conventionality, insisting on "It's me" and other analogous expressions; and a writer, whose perceptions are superior to his reasonings, defends with much enthusiasm a poetic, resolute, defiant "I'll be me."

Relations that were actually found

For reasons which I later indicate the (natural) rational (advanced) conception of the passive meaning (pp. 31–32) was not generally reached. When the thought at first expressed by the reflexive sentence was reorganized, the new relation that should have been found, unfortunately was not found—not found, at least, by many. The relations actually found were

* With this peculiar government by what is called the copula "to-be" rank also the exceptions offered by "to seem" (or "be apparently") and other so-called "copulative verbs."

very different. The evolution of the passive mode of thinking was in the majority of minds diverted—personally I prefer to say perverted.

Perversion of the passive evolution

How this happened I can best appreciate by going back a little "for a running start," observing first that what we rank as worth the effort of expression always may be sensed as multiple. One idea hardly stirs us to such effort. The mental picture of the biggest fish I ever caught, I care but little to produce before your mental eye, except conjointly with the mental picture of myself. Even two ideas are not a thought, but merely one idea and then again another idea, unless combined into a thought by a relation. To hang my portrait in your mental gallery beside the picture of the fish, is hardly worth the effort, if you do not further sense me in relation with the fish, as catcher to his "catch." A trio of ideas, two and what they have to do with each other—their relation—are the minimum of thought-communication.*

Of relations doubtless some are easier to apprehend than others. To grasp the bulk-superiority of A to B requires surely less exertion than to sense the difference between "eventuality" and "possibility." Relations of the latter type—since they are later recognized, and far less frequently—are less familiar. They are also much more difficult per se. In a given case they have less chance of being apprehended.

Applying now the recognition of this difference between relations, think a moment of, for instance, a collision—rather, say, an impact. However absolutely the occurrence be, to first perception of the mental eye, a blended whole, it plainly cannot be linguistically so exhibited; for almost always our vocabularies offer us at best a word for every constituting element of a particular occurrence—none for the occurrence as a whole. Of necessity we sense it, in linguistic thinking, in its details. I, for instance, sense the impact as an A, a striking,

* That all the members of a trio be expressed by *words* is plainly quite unnecessary, gesture or "the situation" often operating in the place of words.

and a B. As indicated just above, I have a keener mental eye for a relation (caused by striking) to obtain between the A and B, which are material, than for relation to obtain between material A and striking which is immaterial, or between the immaterial striking and material B.

But perception of this natural relation was obscured by several influences. Of these perhaps the most effective—one which was presumably already operative in the active mode of thinking—was that dual recognition of thought as subject and predicate, which I have elsewhere at some length antagonized.* Repeating here in brief, I note that, while I certainly can sense an insect as consisting of a head and what follows, I can doubtless sense it also as a tail and what precedes, or even as a body and what precedes in part and partly follows. Yet I luckily can sense it also as a head, a thorax (body) and an abdomen (tail). So also I am able to conceive my thought, not only as a subject and a predicate, but also as this and that and what they have to do with each other—as first term, last term and relation which subsists between them. But Grammar and even Logic, in their merely dual recognition—for to me the further recognition vaguely indicated by their "copula" is but the recollection of a unity inhering still in what they fancy they have severed ("analyzed")—give the subject, or the starting point in thinking, an importance which to me is quite fictitious and unnatural, as if what I am talking of were on at least a par with all the rest of what I have to say. The scratch-line of a foot-race hardly equals in importance both the goal and intervening space combined; the where I get and how I get there, or what I encounter on the way, can hardly mean to me no more than where I start—in running or in thinking. But the recognition of a thought, or sentence, as consisting of a subject and a predicate, has operated much as if its advocates had chosen to regard a thought as "a head and what is left," the last term and particularly the relation (that subsists between the first and last term) largely losing in that "what is left" distinctness, individuality, importance.

* "Interrogative Thought." pp. 365–369.

Again, the "agreement" of the subject and the verb in number and in person, further so distracts attention of grammarians from the mental juxtaposing of the subject and the object, that the relation which obtains between the two is generally altogether overlooked. For instance, though "A equals B" is surely often used as if in answer to the question "What relation holds between the bulk of A and that of B?" that sentence is interpreted as if it always were a statement of the bulk of A in terms of that of B—as answer to "How big is A?".

This attention to "agreement" ought to lead to a distinct perception of the subject and the verb as in the obvious relation of an actor to (his own particular) action—that one in which he is implicated—not some other action. But in fact the attention finds the subject and the verb to be in such relation only as is hinted by the declaration that the subject "is *the* subject of a particular verb"—a statement quite as valid when the passive voice is used, and with the active when there is no intimation of an actor or an action—a statement which accordingly can not exclusively or certainly suggest relation of an actor to his action—a statement which is but a clumsy cart-before-the-horse announcement of what the "agreement" really tries to tell us, namely that the verb "is *the verb* of a particular subject."*

If entirely consistent, Grammar further would announce for instance in "The boys eat my apples" that, not only "boys" is subject of the verb, but also that the verb is verb of the object "apples." That is, we should, though vaguely, be instructed in relations that obtain in turn between the boys and eating, and between the eating and the apples. Recognition of essentially this sort indeed is necessary to the unity of total thought, for if we do not recognize relation (eating-formed) between the boys and apples, but begin with boys in a relation with the eating, a relation must be further recognized between the eating and the apples; for the apples otherwise would be irrelevant.

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* It seems to be forgotten that my subject may be such, although I even have not yet determined what shall be my predicate.

But recognition of the verb as verb of the object* takes the inconvenient form of recognition that the object is the object of the verb. Accordingly, to feel the oneness of the total thought experienced as "The boys in relation with an eating, itself in relation with my apples"—to feel this oneness as prescribed by Grammar—looking in "The boys eat my apples" first from left to right, I sense "The boys" and "eat" in the relation of a subject to its verb; but to sense, as Grammar does, the "eat" and "apples" in a further indispensable relation—that of object to its verb—I am required to look from right to left. Thus proceeding, I appreciate that somehow "boys" is in relation with an action which in turn is still more "somehow" in relation with "my apples."

In the active voice, to generalize upon my illustration, Grammar fails entirely to sense the actor-to-actee relations (e. g., between the boys and apples, that of eater-to-food)—senses the relations of actor-to-action (e. g. that of boys to eating) very dimly—senses the relations of action-to-actee (e. g. that of eating to the apples) still more dimly, also very awkwardly, perhaps the best appreciation of the last relation being indicated by the class-room question: what does "eat", for instance, "take as object?".

Bewildered by unnatural conceptions reached in dealing with the trio formed by actor, action and actee, it hardly could be hoped that Grammar would fare better when confronted with the more perplexing trio formed by the actee, the action and the actor. Imprimis, in e. g. "My apples are eaten by the boys," to recognize the food-to-eater relation—the reverse of an eater-to-food relation which the active voice had not succeeded in revealing to grammarians—was plainly out of the question. But the way was cleared for truer apprehension of the other possible relations by a fortunate forgetting that the nominative noun had been supposed to name the doer of the action—the accusative, what suffers it. Though presented by a nominative

* Such expressions as "Les pommes que j'ai mang*ées*," in which the (compound) verb may be said to agree with both its subject and its object, plainly lose importance in the rather disconcerting inverse order of the verb and object.

noun, the subject of the passive gained a little flavor of what suffers (possibly because its verb was thought to name a "being-done" or, say, a "being-eaten" different from an "eating," see p. 1), hinting at relation of actee-to-action, which however does not seem to be at all distinctly recognized. The most that can be said is then perhaps that there is felt to be—as also when the active voice is used—a mutual belonging of the subject and the verb, the subject surely not however being thought of now as doer of the action. Grammar seems indeed incapable of clearly recognizing a relation formed by action, either in the active or the passive sentence, till it comes upon the "by" of passive usage, which it classes as a preposition, sometimes adding that "a preposition names a *mere* relation."

Though relegated thus to what was wrongly thought to be inferior rank, relation indicated by that preposition, so to speak, was strengthened. When, for instance, apples ceased to be conceived as "doing eating to themselves" with some assistance from the boys—or, say, as helping in the eating—all the burden of accomplishing the eating fell upon the boys; and "by", instead of meaning "with the aid of", came to mean "by the exclusive agency of" (see p. 21). That is, the eating and the boys were clearly recognized in the relation of an action to its actor—a relation which, however, being indicated by a preposition, is no part of what the passive verb expresses.

In recapitulating, I should bear in mind that users of a given word or combination do not of necessity think all of them alike in using it, and even that the individual user's thinkings may be different at different times. The slaves of Grammar and the devotees of language history, in saying "if you please," presumably regard the "you" as object indirect, as if the phrase were "if to you be pleasing." You and I however probably agree that "you" is subject, and that "please" has come to mean "prefer" or "like," as plainly is the case in "if I please," etc.

Thus put upon my guard, I think it probable that many users of the words "The boys eat my apples" think as indicated by "(The boys accomplish [eating) affects the apples]"—or

"The boys are in the actor-to-action relation with an eating which is in the action-to-actee relation with the apples." Of the "active" sentence thus interpreted, "My apples are eaten by the boys"—with the meaning of "The apples are in the (but dimly seen) relation of actee-to-action with an eating which is in the action-to-actor (clearly seen) relation with the boys"—is, except in form, the exactly corresponding passive sentence.

But if, as I suppose is proper, it be held that "eat" expresses, unassisted, both an actor-to-action (the eater-to-eating) relation and an action-to-actee (the eating-to-food) relation—the former commonly appreciated only as the subject-to-verb relation, and the latter only as the object-to-verb relation*—then that factor of the passive sentence which we call the passive verb—dividing function with the preposition, and itself expressing only the relation of actee-to-action—thus expresses only part of what the active verb expresses, and accordingly is not in the now considered case its reverse or correlative.

But I think it probable that many—most, perhaps—of those who say "The boys eat my apples" think directly from the boys to the apples, reaching an immediate relation (action-caused) between the two. To illustrate by a simpler case, I do not think of myself as brother to my father's son, and further of that son as father to his daughter. I make a short-cut, thinking of myself and her as in the uncle-to-niece relation. Analogously I seem not to think of boys as eaters in an eating in which further I conceive the apples as the food. Rather again I make a short-cut, thinking of the boys and apples in the relation of eater-to-food.†

Now persons who, in saying "My apples are eaten by the boys," mean "My apples are in food-to-eater relation with the boys," use "are-eaten-by" as the exactly corresponding passive

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* This relation might be held to be expressed by the accusative inflection; and possibly it so is held in fact by users of the well-inflected languages; but, in our own, it seems to me the transitiveness of a verb—its need of an attendant object—indicates that it should be defined as naming "an action plus that action's action-to-actee relation with ....."

† It does not seem to me however in the least impossible that both

voice of "eat" interpreted as naming the eater-to-food relation. But of such users I suppose there are at most but few. In the prevailing usage, then, it may be said—as I began to argue on p. 37—that evolution of the passive in the first place was diverted or perverted.

Arrest of passive evolution

There still remained the possibility of fusing in the meaning of the passive verb the two relations whose expression was respectively effected by the passive and the preposition "by"—the noun for the actee continuing to be inflected nominatively, because in "passive thinking" (ipso facto) the actee is the first term—the actor-naming noun however being put in the accusative without a preposition, since the actor in a passive thinking is the last term, destination, or arrival-point of mental transit. (Conf. "Romam ire"). But, until this possibility be

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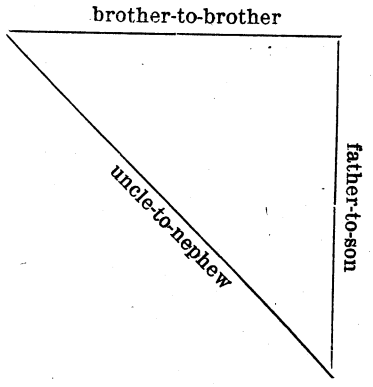
the single short-cut and the two-fold roundabout relation be in mind together. In this diagram of three relations and three lines



in which the words adjacent to the upper right-hand angle are supposed to name one person, I can see undoubtedly three lines at once; and doubtless I can also simultaneously sense the three relations. The required effort surely is no greater than the one demanded by "11:22 :: 13:26," which calls on me to sense relation of equality between two other relations (ratios)—an operation which I certainly cannot effect, with either of the three relations out of mind. I am not however to be understood as meaning that the short-cut and the roundabout are both expressed, or that each one is part of *thought intended for expression.*

realized, it may be said that in the second place the evolution of the passive was arrested.

Of linguistic thinking, what I must accordingly concede to be the accepted passive mode—which recognizes two relations (one between e. g. my apples and an eating; one between that eating and the boys)—at first may seem implausible, because it corresponds so inexactly with what I regard as the accepted active mode—which recognizes one relation only (that e. g. between the boys and my apples). Yet the inexactness of this correspondence has its close analogies. The musician does not choose, for the descending minor scale, all notes he played in the ascending. Now and then the Mississippi river cuts the neck of a far-sweeping bend. Two channels are accordingly available. Going down the stream you choose—or, rather, hardly can avoid—the shorter, swifter channel. But if you now reverse your course, it may be you will find that you can make no head against the stronger current of that channel; or your progress is so slow and painful that you wisely let yourself be swung into the other. So also even in the telling of your "passive" thought, perhaps you find "The longest way 'round is the shortest way home."

B—THE FIGURE OF ACQUISITION

As what I said of self-infliction in the main applies, with only obvious modification, to the now-considered figure, I can make the exposition of the latter very brief.

To illustrate, given "Henry broke the knife," suppose, instead of thinking (as that sentence indicates) from Henry to the knife, I start my thinking with the knife and end with Henry. I may figuratively construct my thought as indicated by "The knife acquired fragmentariness through agency of Henry."

Expression of this type, on which I base my present title, also may conveniently assume the form "The knife *became fragmentary,* etc.", in which the words italicized may be endured as merely an ambitious substitute for the more popular "come broke."

Dealing rather now with form and structure of my thought than with its substance and constituent elements, I lay no stress on choice of prepositional phrase or preposition—e. g. a (ab or abs) von, durch, ὑπό etc.,—electing for convenience "by." Accordingly "The knife became fragmentary by Henry."

In this expression knife and fragmentary status (posed as quality or attribute of knife) appear in a developing or formative relation (that of object to its quality)—not in a relation already established—these relations being readily distinguishable as the one dynamic, and the other static. That is, linguistic cerebration in the present case is true to Hegel's doctrine, humorously summarized as follows: "Nothing is, and nothing's not, but everything's becoming."

Figurative thinking then—in this case almost the personifying of a knife, conceived as passing (from relation with its prior wholeness) to relation with its (later) brokenness—has merely slighted the departure-point, in its preoccupation with the passage and arrival-point. (Conf. p. 38.)

To exhibit clearly passive evolution from a figurative acquisition (or development or passage-and-arrival) I need to use what commonly is known as the past *and passive* participle, in its earlier exclusive value—that is, *only past,* by no means passive—in the sense in which we find it in the German "Heinrich ist gekommen," also even in the corresponding English "Henry is come," in each of which the final word might be defined as meaning "in a state of having come," or simply "here."

Using somewhat so the participial "broken" in the sense of "fragmentary," I will substitute it in my illustration. Accordingly, "The knife became broken (fragmentary) by (through) Henry"—in the actual German, "Das Messer wurde (von) durch Heinrich gebrochen."

Reasoning analogous to that applied to figurative self-infliction, would presumably establish that, in the meaning of the German sentence, an original relation, sensed between the knife and fragmentariness, gave way to a relation sensed between the knife and the act of breaking (which produced the frag-

mentariness)—a relation of actee-to-action. That is, as the result of shifting in the mental point of view, the figurative acquisition-phrase, at first by no means passive, came to be as much a passive as the classic phrase of self-infliction, and by no means figurative.

C—THE FIGURE OF QUALITY

To illustrate, given "Henry broke the knife," suppose again, instead of thinking (as that sentence indicates) from Henry to the knife, I start my thinking with the knife, and end with Henry. I may reverse my thought as indicated by "The knife was fragmentary through the agency of Henry," figuratively exhibiting the knife and fragmentariness in the relation of an object to its quality.

Strictly speaking it must be admitted that the mental picture thus expressed reflects a moment subsequent to that of breaking, and exhibits not at all a breaking, but resultant brokenness. Each of these however implies the other. Indeed, it may perhaps be said that, heeding now the one and now the other, we no more forget their oneness, than the eye of one in motion overlooks the oneness of a changing scene perplexed by parallax. Accordingly it may be held that either picture adequately corresponds to outer-world reality.

In the exhibition of the second mental picturing let "broken" take the place of "fragmentary," the resultant total being then "The knife was broken through the agency of Henry"—or "The knife was broken by Henry"—an expression which I do not yet intend as passive. "Broken," somewhat as before (See p. 45) shall still be understood as "in a state of brokenness."

Let now the mental picture offered by "The knife was broken" be so blurred that detail is forgotten. Discontent is sure to follow. There is sure to be a striving for distinctness. "Brokenness" with utmost ease suggests the far more vivid "breaking." "(The knife) was broken" may be reinterpreted as the expression now no longer of a status (of the knife) but rather of a prior, status-forming action.

Reasoning analogous to that applied to figurative self-in-

fliction might establish that, in thought intended by my illustration, the relation which at first obtained between the knife and brokenness—relation qualitative, static—was displaced by a dynamic action-caused relation of actee-to-action—of knife to breaking ("being-broken"). That is, as the result of shifting in the mental point of view, a figurative phrase of quality, by no means passive, came to be an action-phrase as much a passive as the classic phrase of self-infliction, and by no means figurative.

While it is presumable that other lines (to me unknown) of passive evolution have been followed, both analogy and *a priori* indication lead me to expect of it in every case a figurative start and a peculiar, not to say a rambling course.

Case II—When Used Without an "Agent"

In the absence of the agent of the passive voice—in other words, the actor of the active voice—the only elements immediately offered for construction of an action-thought appear at first to be the action and actee (or object of the *active* voice); and they are not enough.

To illustrate, if I set before your mind together a baptizing and, say, monkeys, you presumably are far from satisfied. You want to know what the baptizing "has to do with" monkeys. Any inference to which you may be tempted you renounce, because it is implausible. You are conscious that my thought, so far as you can duplicate it, needs another element, to be complete. You satisfy yourself that in the case before us, as in other cases, thought conceived in detail must consist at least of two terms and what one term has to do with the other—say, then, the relation which obtains between them.

In the present case required relation seems to be evolved as follows. When the actor is eliminated, though without him the phenomenon in which he played his part must seem at first to mental habit but a fragment, still it soon is recognized that nothing will be added by the speaker to complete it. Tolerated first as the merest all-there-is of thought-to-be-exhibited—

accordingly as only a de facto whole—the fragment quickly takes the rank of a de jure whole and readily is sensed in detail as an action, an actee, and their reciprocal belonging; or—to think of rather one of them alone in its belonging with the other, or its "having to do with" that other—we may pose them, in the "active" form of thinking, as the action, the actee, and that relation of the action to *its own* actee, so dimly recognized by Grammar's dictum that, in any phrase or sentence representing such a thought, the noun is *the* object of the verb.

In illustration of the now-considered case I offer the expressions "Il fit *bâtir une maison,*" "Fecit *aedificare domum,*" of which the words italicized express an action (named by "bâtir", "aedificare"), the relation of the action to its own actee—specifically that of building to what is built, incorporated in the meaning of "bâtir," "aedificare"—and an actee ("maison," "domum").* That is, their meaning may be rendered by "He caused (never mind whom) *to build a house.*"

The gratuitous imagining of an indefinite actor (e. g. "someone," as the object direct or indirect of "caused," or subject of "to build"), the violent conception of "bâtir" as passive ("maison" being held to be its subject), and the French grammarian's ingenious, though delirious, interpretation of "fit bâtir" as a causative verbal unit,† are so foreign to my own pro-

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* The words "Il fit" and "Fecit" are irrelevant to the case in hand, and are admitted only because I do not think of any satisfactory case in which the now-considered type of thought obtains expression, save the clause employed as a substantive.

† Lest I seem unfair, I note that building is a mere variety of making or creating—that is, causing to exist. This causing to exist indeed I readily make over into an investing with existence, blend this total into a single act, and pose it as affecting what I choose. Indeed I can do more, accomplishing with no great effort the linguistic feat of blending "cause to be more beautiful (than it had been before)," expressing all of this by "beautify." But if I be commanded to effect a blending of "*to cause* to make"—that is, "*to cause to cause* to exist"—I must admit that I'm in danger of a serious blunder.

"Any man can lead a horse to water; but the king himself can't make him drink." And I—while I can blend in thought the *total* "cause a horse to (drink water, i. e.) cause water to enter his stomach"—I cannot blend the causing of the drinking, while conceiving in their individuality the horse and water. "To cause to drink," for momentary purposes, may adequately be expressed by "drench;" but "drench the horse the water" is too much for any syntax in my

cedure that I find myself unable to antagonize them even rationally.

Dealing then with only what materials I surely have, and as I seem to have them, I observe that—given in the active form of thought the act of building, the relation of the action to its own actee, and the house—if I reverse this trio, I obtain the house, the relation of actee to its own action (the one with which the said actee is properly associated) and the action. In the expression of all this, as in the active voice so also in the passive, as it seems to me, relation is incorporated in the meaning of the verb which names the action. That is, in "maison être bâtie," "domum aedificari" (a house to be built"), it is by what distinguishes the verbal form as passive that I find the relation of actee to its own action indicated.*

In this case then the passive is *the* passive of the active voice. It is only such, however, as a consequence of having, like the active, overlooked the actor, abrogating like the active much of its prerogative and interest.

Case III—When Used Without a Subject

In the absence of the subject of the passive voice—in other words, the actee—the only elements immediately offered for construction of a thought appear at first to be the action and the actor, known as "agent," (subject of the *active* voice); and they are not enough. But, posing as the terms of thought, they readily suggest appropriate relation, as required for thought completeness.

To illustrate, the occurrence, in the active voice recorded by the sentence "Omnes eunt," is reflected in the mind at first, I

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power—or that, I much suspect, of any one. To clearly pose the horse as drinking, I must sense the drinking individually, in no coalescence with the causing—also if I wish to pose the drinking as a drinking of the water; and, if I would pose the king as only causing, and not drinking, I had better sense that causing in no coalescence with the drinking; for, so long as drinking blends with causing, I am powerless to forestall misunderstanding—scandal. The horse may have the King's nose in the trough in spite of me.

* Indeed I do not know where else to find it. Order has no value; nor has noun-inflection.

doubt not, as a blended whole. But the installment-plan of thought-delivery by words compels the secondary recognition of this blended whole in detail as consisting, say, of persons and a going—that is, two constituents or terms; and these must still maintain in mind their mutual belonging; rather, one is felt to belong with the other, or to "have to do with" it; there is felt in short to hold between them a relation. This relation—hinted by the statement of the grammars, that the noun is subject of the verb—I choose to recognize as rather that of actor to his action. To exhibit this relation very plainly in translation, I might choose the expression "All *perform* (or all accomplish) going" or even "All *are* going." But I accept the usual "All go," in which however it seems to me the said relation is a part of what is meant by "go;" and I suppose it also to have been a part of what was meant by "eunt." Completing thus the number of ideas necessary for construction of a thought, I do not feel the need of any object, be it cognate or—if you prefer it—innate, for the verb. Accordingly I am not tempted by "All go a journey" or "All go a going."

That I have not read presumably excessive meaning into "eunt," may be hinted by the sentence "Horses advertise," which I imagine stirs you to the question "What have horses to do with advertising?"—or, with more distinctness, "How can advertising be the act of horses?"—an inquiry which assumes on my part an intention to declare, between the horses and the advertising, the relation of an actor to an action of his own. Analogously "Omnes eunt" shall be held, as indicated, to express an actor, the relation of the actor to his action, and the action.

The exact reverse of this trio—or, say, the same idea-series posed in the opposite order of succession—is the action (going), the (necessarily reversed) relation of the action to its actor, and the actor. Accordingly any form of a verb which expresses this relation, shall be ranked as the passive of whatever form of that verb expresses the (corresponding proverse) relation of actor to his action. Thus, in the present instance, any verb which expresses the relation of "going" to its own

actor ("omnes") shall be ranked as passive—and *the* passive of "eunt."

As however in Case I relation of the action to its actor was expressed exclusively by prepositions, it can hardly be expected that the preposition in the present case will abdicate in favor of the verb. Indeed I do not at this writing know of any verbal form of which the meaning can be stretched to cover this relation. The sole approximation, even merely formal, is afforded by expressions such as "Itur ab omnibus," which, masquerading as the passive paraphrase of "Omnes eunt," has been tolerated more or less unflinchingly by language students. A moment's observation shows however, as it seems to me, that in "Itur ab omnibus" the relation of action (going) to actor ("omnibus") is well expressed by "ab"; and I see no reason for believing that it is again expressed by "Itur." However much opinion differ in particulars, it seems to me it will agree upon the meaning of "Itur (ab omnibus)" as of the type expressed by "Something is done (by all)"—a type which might be disregarded, as apparently a rather unimportant variant of Case I.

I wish however not to leave this difficult case without establishing its nature somewhat more exactly; and, in doing so, I need the aid of what I must content myself with posing now as postulates, yet hoping that they may seem plausible enough to invite assent, though unsupported by the reasoning which attended them in previous publications.*

A minimal or unextended judgment, as it seems to me, consists, in ordinary thinking, of a thought (i. e. two terms and their relation, see p. 37) and belief in its "truth," by which I mean its being matched by external reality. This truth is first, no doubt, associated by the mind with total thought. But the associations utilized in the linguistic thought-construction commonly are much more special: an obviously genuine associate of total thought is frequently displaced by an associate of one thought element; in particular the place of truth conceived as spreading over total thought, is taken by the suitableness of a single term (to the completion of true thought)—that is, by rightness.

Belief in rightness, which is my interpretation of affirmative assertion, might no doubt associate itself with any element of thought.†

* See Interrogatives, pp. 376–380, etc.

† Such freedom of association often is suggested, if not indeed established. Thus, in "(What is the relation of A and B?—A equals

But in actual linguistic practice the belief in rightness (i. e. the assertion) clings to the relation—to the most important element of thought. I say the most important, for the earlier thinking surely was the finding of relations for already given terms, and not the finding of the terms to suit already given relations.* The sheep which was found occasioned more rejoicing than its fellows which had not necessitated any search. This prestige relation never abrogated. Relation was accepted as the nucleus of thought; and hence with it particularly, truth of total thought—made over into rightness of a single element of thought—was still associated, even in the case in which that rightness should have been associated with some other element. Further when, in an extended judgment, there is more than one relation, the belief in rightness (i. e. the assertion) is associated with the focal, central, dominant relation—not with any that is marginal, lateral, subordinate. Thus, in "Careful managers employ men of steady habits," it is the relation found between the managers and men that is asserted, though relations plainly also hold between the managers and carefulness, between the men and habits, and between the habits and their steadiness.

When moreover (1) relation is produced by (2) action, a single word—a verb— is made to exhibit both, and further made by suitable inflection (actual or virtual) to indicate (3) belief in (4) rightness—that is, to assert affirmatively as, for instance, in "My uncle rents his house." No doubt, in the expression of a judgment, it was possible to furnish each one of the four with a particular symbol; but in actual linguistic practice, the expression of them all is forced upon the verb—the verb in the indicative, by which I would include the verb subjunctive (optative, conditional) in form alone (employed e. g. in certain cases to assert conclusions), and exclude the verb indicative in form alone, employed often when assertion certainly is not intended, as for instance in "I don't believe Durand *is* ill," of which the "is" no more expresses my belief, than would "to-be."†

B.—No!) *C* equals B," belief in rightness, or in other words assertion, plainly is associated, not with "equals," but with "C.". Or rather I should say that, while linguistic precedent affords no sanction for asserting "C," I nevertheless distinctly indicate by emphasis that "C" is what I would assert, were it permitted. In short I clearly intimate that, in my pre-linguistic form of thinking, given "equals B," I feel assured that "C" is what is needed to complete a mental picture matched by outer-world reality; or "C," in other words, is right—is what I would assert.

*To illustrate, doubtless primitive humanity began with reaching $=$ or $>$ or $<$, as the result of mental stimulus exerted by an A and B, and not with reaching B as the result of stimulus exerted by A $=$, or by A $>$, or by A $<$.

† What are usually ranked as verbal variants, imperative (asserting my desire that another e. g. act) and interrogative (asserting my desire that you give me information as to e. g. action) I have elsewhere made an effort to identify as independent verbal types. See "Interrogative Thought."

In negation the alternative of rightness, namely wrongness, is expressed by "not" or an equivalent. As the following investigation does not enter into differences between affirmative and negative assertion, I may overlook them now in making a distinctive list of elements contributed, in the expression of an action-judgment, by the verb—as follows:

A dominant relation (action-formed) and

an assertion

Lest I seem to overlook the other parts of speech that also name relations, I admit that a relation-namer, (say "superiority," "superior," "superiorly") when abstracted from its terms, is capable of sentence-membership as any part of speech. But the preposition is the only other part of speech that, like the verb, exhibits a relation in immediate association with its terms. Thus "superiority," and other namers of relation in the abstract, all apparently require prepositions as the indicators that, in the relation named, attendant terms are implicated. For example, "the superiority *of* steel *to* iron."

The preposition is accordingly the only part of speech that could aspire to the expression of the thought-contingent that I have supposed to be imported by the verb alone. I seem to see however that the aspiration never would be realized. In support of my belief I merely note what I intend to argue in another publication: that the preposition, in its meaning, does not comprehend assertion; that, although the preposition often names relation surely the result of action, it makes no attempt to name the action itself; that the preposition does not name a dominant relation; that the preposition and its object operate together as an adjunct—a subordinate element. For instance, in the sentence "Brown was struck by Robinson," whatever be the intrinsic notability of what the preposition means, in the linguistic thought-perspective "by" and "Brown" (or rather the ideas which they name) together enter thought-construction as the adjunct, the attendant in the background of—I care not now precisely what; perhaps of Brown, perhaps of any of the several elements incorporated in the meaning of the verb. In conspicuous contrast with that adjunct, Brown, the relation of Brown and striking, and the striking occupy the foreground, forming thus together a sufficient mental entity; for while "by Robinson" is valueless except it be associated, say, with "Brown was struck," the latter formally at least is self-sufficient.

Returning now to "Itur ab omnibus" I find in "Itur" (an indicative) assurance* of intention to express a judgment or, in other words,

* Moreover, as I have contended elsewhere, in linguistic practice every exhibition of a thought by courtesy implies assertion; for, outside of poetry, in which for instance the intrinsic beauty of a mental picture is sufficient warrant for displaying it, you do not care to see the pictures in my mind, unless I vouch for them as something

two terms, a focal (central, dominant) relation sensed between them, and assertion. The dominant relation and assertion are expressed presumably by "Itur." I do not find however that a single item in the listed total is expressed by, or receives the slightest aid from, "ab" or "omnibus" or both together. For, if the meaning of "Itur (ab omnibus") (as indicated on p. 51) is of the type expressed by "Something is done (by all)," required judgment is complete in form, without adjunctive contribution by "ab omnibus."

The effort to interpret "Itur" more exactly may with safety then ignore "ab omnibus." Accordingly, I shall not make the effort till I reach Case IV—the case in which the passive voice is used without a subject or an agent—in which the unattended "Itur" will be studied in the light of other similar expressions.

However, to complete the present topic, I may add anticipatively that in Case IV I do not find that unattended "Itur" in its meaning comprehends a genuine relation of an action to its actor. "Itur" in association with "ab omnibus," though possibly the passive of some active verbal form (existing or imaginable) can not then be held to be the passive counterpart of "Eunt," which expresses the relation of an actor to his action in the sentence "Omnes eunt."

"Eunt," so far as I have noted, has no proper passive. The reverse of the relation (that of all to going) which it names, so far as I have found is always nominated by a preposition; and a preposition hardly will be ranked as passive till, assuming the assertive function, it becomes—essentially at least—a verb.

Case IV: When Used Without a Subject or an Agent

Even illustration of this case is hampered by the prevalent intrusion, into modern-language sentences, of elements which seem to me to have no meaning—or, in other words, to stand for no ideas. For example, in "Es wurde gespielt, gesungen und getanzt," I cannot find a bona fide meaning for the "Es",*

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more than figments of my fancy. For instance, while I might arouse your interest—and even lay you under obligations—by "It rains;" and while no doubt you would forgive me if I made occasional mistakes in such announcements; doubtless I should only vex you by the unassertive "It to rain"—and hardly less than by a downright lie. Indeed linguistic trifling in either form presumably would quickly bring about suspension of linguistic relations.

* The interpretation of a thrice effective (trebled) "es," as in succession "playing" "singing" and "dancing," either *intro*duces an offensive

which is to me the merest formal stop-gap, quite analogous to the indefinite subjects and objects which occur in "Go *it*" (though I fancy "it" has here a meaning which I merely cannot find), "*It* rains," "Per me *se* va nella cittá dolente" (Through me *is passage,* etc.; hardly, "Into-the-city goes itself"), "*Il s'*agit (There is action) de ma vie," "*Se* me olvidó" (There was forgetting for me), "Wie hübsch spielt*'s sich* den Vater!"

In all these illustrations the indefinites, including the reflexives, as it seems to me, afford a merely formal satisfaction of a vaguely conscious need of actor and actee in the assertion of an action. That indeed their use is formal only, is particularly indicated in the final illustration (from "Der Neffe als Onkel"—Act I, Sc. 7) by the "sich," which takes indeed the object-place.....ostensibly, but cannot actually close it to the bona fide object "Vater." That the subject "es" is quite as spurious, is implied in its presumable meaning-identity with "sich." Perhaps accordingly I do not modify essentially the mentally conscious total by reducing "Es wurde gespielt" to "Wurde gespielt" or, in the present tense, to "Wird gespielt"—a sentence with no indicated actor or actee, no subject and no object.

As my most effective illustration is distinctly out of sympathy with the conceptions prevalent in class-room parsing, though I have some confidence that Schiller (its distinguished author) rather well knew what he was about—and think he showed his purpose very clearly—I add a brief endorsement of his method.

Reducing his expression, which I also rid of its embarrassing exclamatory aspect, I obtain, as the essential of the moment, this: "Es spielt sich den Vater." In this expression "Es" and "sich" to me are virtually mere inflections—isolated, supernumerary. An imaginary need of both a subject and an object—legible and audible—has reached imaginary satisfaction. The formal superfoetations "Es" and "sich" have added nothing to the total of ideas. As well then "Spielt" without them—the assertion of a playing—quite analogous to "Pluit."

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and implausible abuse of cognates, or, by a counterbalancing *re*duction, further making "wurde gespielt" "gesungen" and "getanzt" each one in turn mean "was effected," brings about a verbal repetition almost equally offensive and implausible.

As "Spielt" alone can take the object "Vater," so can also *"Es* spielt *sich,"* which stands for action unattended in the mind by any actor or actee—attended at the most by empty categories of the two. A mind like that of Schiller surely did not put in "Vater" in a place which he regarded as already filled.

Rare in northern languages, linguistic operation of this sort is less unfrequent further southward—common in both Spanish and Italian. I quote from the last pages of my reading in the former language (1) "Se ha estranglado á los sacerdotes," (2) "Los dioses que se adoraba."

The interpretation of "Se" in either case as the equivalent of "Man" or "On," I must abandon to whoever can make use of it. (Let such a one experiment with "Se llueve" etc.) Regarding usage as hereditary, and adhering to analogy of other languages, I render "Se" by "itself." As usual in Spanish I supply a subject—the only one compatible with "se" ("itself")—the precisely correspondent "It."

The *personal* object-*noun* (direct) in Spanish is identified by an attendant "á." Accordingly the following translation (1): "(It) has strangled (itself, or for itself) the priests." In other words "(There) has occurred a strangling (of) the priests."

In (2) the use of "á" would not extend to a *pronominal* object. "Que" accordingly is not by such means indicated as the object of the verb. As obviously pronoun relative however, "que" can only be "referred" to "los dioses," being thus established as of plural value—therefore not presumably the subject of the singular verb—therefore of necessity its object. As before, accordingly, I render "se" by "itself," supply as subject "it", and then translate the whole expression by "The gods whom (it) adored (itself)." In other words, "The gods, an adoring whom occurred."

Analogously let "Es spielt sich" be reduced to "Spielt"—a one-word sentence (of the "Pluit," "Piove" type) which also indicates no actor or actee. This and "Wird gespielt," as I already have contended (p. 2) will be found to name the same

phenomenon; and yet I am persuaded that, whatever the relation found to be expressed by "Spielt," the same relation hardly will be found to be expressed by "Wird gespielt." Indeed a most inviting explanation for the using of the passive "Wird gespielt" would be that it was brought about by consciousness of a relation the exact reverse of that which finds expression in the active "Spielt." But as we continue we shall find, I think, in actual practice that, in such a form as "Wird gespielt," relation of that order is not contemplated.

To find the relation actually intended in the now examined case of passive usage, it is necessary to perceive the terms between which the relation holds. Looking now for these, I am quite unable to discover, either in "(Es) spielt (sich)" or in "(Es) wird gespielt," the slightest bona fide hint of anything which can effect the playing, or anything on which the playing operates. The phenomenon of playing is not sensed in usual detail as an actor and an action—and perhaps an actee also. The case is quite analogous to that of raining as expressed by "Pluit."* The (output energy) action and the implicated personnel remain—as doubtless they at first appeared in consciousness—a blended whole. There being thus no recognition of an actor or actee, the usual relations of (1) actor-to-action, and (2) action-to-actee, as well as the thereto equivalent, therefrom derivable relation of (3) actor-to-actee, are of necessity unexperienced. So too the usual reverse relations of (2) actee-to-action, and (1) action-to-actor, as well as the derivable relation of (3) actee-to-actor, must alike be unexperienced.

At this stage of investigation I prefer sentential specimens which are not even formally denatured by the presence of a supernumerary member—be it subject—be it object. "Pluit" will do very well for study of the active voice; and "Itur" of "Sic itur ad astra," not attended by "ab omnibus" as on pp. 51, etc., will answer for a passsive, the equivalent of "(Es) wird gegangen"—the analogon of "(Es) wurde gespielt" etc.

* Such extensions as, for instance, that of "Pluit" into "Jupiter pluit," call for independent explanations of their own, which do not seem to me to explain e. g. the unextended "Pluit" or "Piove."

I wish moreover, to facilitate comparative examination, that my active and my passive specimens be forms of one verb only. Not however finding thus far any verb to furnish them, I do some violence to Latin usage, postulating "Pluitur", which I propose as tantamount to an also postulated, not however quite so violent, "(Es) wird geregnet"—the analogon again of "(Es) wurde gespielt."

My specimens at once suggest a facile interpretation. The action (raining) might with little difficulty take the subject-place in a figurative thought consisting of the action posed as an active entity, the relation of performer to what is performed, and the action posed as such. That is, the action might be figured as performing itself. "Pluit" might then be translated "Raining performs itself;" and "Pluitur", "Itself is performed by raining," or—because "Itself" and "Raining" are essentially identical—"Raining is performed by itself."

If this interpretation were accepted, recognizing both the members of an action-personnel, the present case would be, except in form, a repetition of Case I.

In the present case I see however not the slightest indication that the mental picture of a self-performing action was developed; for, had it been developed, it might fairly be expected that it also would be formally expressed. The mind that with such ease could, mainly out of mental nothings, build "Es spielt sich" and the like, could doubtless, out of mental somethings, with much greater ease construct "Ein spielen thut sich," or "Das Regnen macht sich"—even "Pluere facit se"; and it is true that in the actual "Es thut sich ein Spielen" many would presumably construe as bona fide subject. "Spielen," ranking "Es" as merely its indefinite prefigurement. But, as shown above, "Wie hübsch spielt's sich *den* Vater!" and analogous expressions common in both Spanish and Italian indicate the accusative value of "Spielen," and the meaning-nullity of "Es" and "sich." Even in the active voice accordingly the figure of self-performance seems not in the present case to have been adopted. In the passive voice the much more difficult "Ein Spielen wird (durch) von sich gethan," "Ein Regnen wird von

sich gemacht" and "Pluere fit per se" impress me as yet more implausible. I accordingly renounce interpretation of my specimens as the expression, in the active voice, of self-performing action—in the passive voice, of action self-performed.

The renounced interpretation may however be in so far right, as it exhibits action as the subject. Action being unaccompanied (in thought considered) by the actor or actee, it seems that only action can be posed as subject. Indeed, perception being jogged by this suggestion, it appears to me that, in "(Es) spielt (sich)" and "(Es) wird gespielt," the playing is precisely "what I am talking about"—that is, my subject. Also I am led to expect that always, in expressions of the now considered type, the action will be found in either voice to be the subject—that is, the first term—of thought expressed. What then are the other indispensable constituents of thought expressed by "Pluitur" and "Pluit?"

In seeking these I emphasize my previous contention that a single word—for instance "Pluitur" and "Pluit"—frequently effects the purpose of a sentence formally complete. As such it should express a judgment. Accordingly its meaning should contain two terms and their relation plus assertion. (See p. 51.)

That assertion is intended in the present case, is demonstrated by comparison of "Pluit" with the plainly unassertive "Pluere." If "Pluere" be subtracted, so to speak, from "Pluit," the remainder obviously contains assertion.

As other verbs assert, so far as I have noted, a relation sensed between a pair of terms, I am not prepared to doubt that "Pluit"—also "Pluitur"—asserts relation sensed between a first term (raining) and some other term— that, in the language of the schools, these one-word statements predicate of raining ..... what?

If the question bore upon the active voice alone, I should in answer probably interpret "Pluit," say, by "Raining is occurrent" or "occurs" or "happens." But if analogously I interpret "Pluitur" by "Raining is occurred" or, say, "is happened," I feel as if the solid earth had failed beneath my feet. I must find in "Pluit" a more satisfactory "predicate" for raining.

What alone occurs to me at first, as predicable of a raining, is reality. Thus confronted, I require for my own enlightenment some correlation of my thinkings with the happenings of the outer world.

To experiment a little, many times I think for instance it is raining, but am afterward convinced that no occurrence in the world about me matches what was going on within me—in my mind. Many times I am more fortunate. I may say accordingly that I develop many mental pictures (counterparts) of raining, some of which are matched by outer-world reality, while some are not. These however in essentials are so much alike, that I am prone to sense them not as many, each presented once, but as one presented many times—or, say, a single picture, sometimes in my mind, and sometimes not. This single frequently recurring picture I further recognize consistently as sometimes matched by happenings of the outer world, and sometimes not so matched—as sometimes true and sometimes untrue. Confining my vagaries to my personal mental business—which I am free to carry on as I elect, and irresponsibly—I have not thus far meddled with outer-world reality. I proceed, however, further.

As a truism, this can hardly be surpassed: the outer world, the world that often matches those conceptions which I rank as true, is made up only of what is. Strictly nothing in that world can tally with conceptions which I rank as untrue. In other words, the outer world does not contain, and only indirectly can suggest, the unreal—that is, what it does not contain. Yet the love, perhaps, of symmetry induces me, particularly in the case of action, not only to suppose my true conceptions to be duplicated by reality (by phenomena that do occur), but also to imagine my untrue conceptions to be matched by unreality (by phenomena that don't occur). In other words I people the outer world with flesh and blood occurrences that happen, and with ghosts of many more occurrences that do not happen.

In my thus extended outer world there are, for instance, rainings that are real and rainings that are unreal. Generaliz-

ing in their turn on these, I reach a single raining of the outer world—a raining which is sometimes real and sometimes unreal. In other words I think of the phenomenon of rain as sometimes busy and sometimes taking a holiday—sometimes active, sometimes dormant.

In either case, however, thus far I do hardly more than couple a phenomenon with what I rank as a temporary characteristic. My mode of thinking is analogous to that expressed by "Yonder cloud is yellow" or "in motion." That is, I do not thus far pose the raining as the actor in an action, but as rather substance in relation with an attribute. Now such conceptions are not commonly reversed. For instance, "Yonder cloud is yellow" or "in motion" does not frequently appear as "Yellow(ness)" or "motion characterizes yonder cloud." While then conceptions of this sort *can* be reversed, reversal is not probable enough to furnish plausible occasion for a passive voice. In particular, if the thought of raining is to achieve a passive evolution, we must start it in a better shape.

Accordingly I further meddle with the outer world. If raining be, for instance, sometimes resting from its labors, and sometimes on the other hand exerting itself, it must occasionally pass from one phase to the other. What particularly interests me at the moment is that raining must, then, pass from unreality to reality. As this passing is a change in outer-world conditions, it requires the output of some energy. This energy, according to linguistic Physics, (see pp. 3, 9–10) may be exerted by the raining or some other agent—possibly unknown and possibly unthought of. In other words the raining may unaided *pass* from unreality to reality, or it may *be-passed,* by which expressions in italics I intend no difference in the passing (see p. 2) but a difference in relations which shall hold between the raining and the passing.

In "Raining passes from unreality to reality," "Raining," figured as an entity, associates with passing in the actor-to-action relation. In "Raining is passed, etc.", the relation of the same two terms is that of actee-to-action. The sentences presented in quotation marks indeed might be accepted as interpreting—the

first one "Pluit," and the second, "Pluitur"; but I think it possible to find for each a somewhat better, though essentially equivalent interpretation.

"Passing (from unreality) to reality" might be sensed as the development of a relation with reality—relation of substance to its attribute—and might be superseded by "becoming real." But while "Pluit" may be well enough interpreted as "Raining becomes real," to interpret "Pluitur" by "Raining is become*.....whatever you please," embarrasses me. Indeed as previously intimated, I shall make but little progress in the study of the passive by examining forms of thought which do not readily find a place for a conspicuous actee. Accordingly, I substitute the equivalent form of thought expressed by "Raining acquires reality," in which the rather vivid figurative action of acquiring is attended by a subject and an object (actor and actee).

The passive counterpart of "Raining acquires reality" is "Reality is acquired by raining." As I do not doubt however that the subject in the thinking registered by "Pluitur" is "Raining," in translating I must find a passive verb of which I may use "Raining" as the subject, while maintaining virtual equivalence between the passive thought to be expressed by my translation, and the active thought expressed by "Raining acquires reality."

For convenience I suggest this so far unfound verb by "blank," and range the outlines of expressions that I need to find, with the expressions that I have already found, as follows:

(1) Raining acquires reality;
(2) Reality is acquired by raining;
(3) Reality blanks raining;
(4) Raining is blanked by reality;

observing first that (1), (2), (3) and (4) express the same phenomenon. Such being the case, whatever verbs shall take the places of "is blanked" and "blanks" must, roughly speaking, be the opposites (see p. 67) respectively of "is acquired" and "acquires."†

* I intend the "is become" as passive, quite analogous to "is occurred" or "happened" of p. 59.

† Compare "absorbs" and "wets" etc. of p. 9–10.

Now, for "acquires," I cannot think of any opposite, except the unreliable "invests" and the coined "bequalify." As both of these are quite unsatisfactory, I take as model "This mortal shall put on immortality," and substitute for "acquires" the figurative quasi-synonym "puts on." Accordingly, "Raining puts on reality"—in the aoristic sense of "Raining occurs," and not in that of "Raining is occurring" or "occurs habitually."

Of "puts on," an opposite is "clothes," and this I substitute in (3). Accordingly, "Reality clothes raining." Of thought expressed by this, the corresponding passive form—obtained by interchange of terms, and the reversal of relation—is "Raining is clothed by reality;" and this—with aoristic value also—I submit as full interpretation of the coined passive "Pluitur," available (with change of subject) for the actual passive verbs which are employed with no subject or a merely formal subject.*

How far the passive in Case IV be held to have resisted the arrest of development, suggested in examination of Case I, depends upon the point of view. If "Pluitur" means "Raining is clothed by reality," expressing two relations—that of actee to action (sensed between the substantive "Raining" and the act of clothing) and that of action to its actor (sensed between the action and "reality")—its development has been arrested. These two relations may however readily be fused, developing the one relation of actee to actor. As the exhibitor of this relation, "Pluitur" exemplifies the possible completely developed passive voice suggested on pp. 28–33, etc.—but with this difference, that it is not the symbol of asserted action-caused relation only, but of such relation and its terms—of an entire judgment.

"Pluitur" indeed—as not an ordinary word, but a one-word passive sentence—is "hors de concours." There is little satisfaction in comparing it with tantamount or parallel expressions,

* One only, of the many whose opinions I've consulted, thinks of "Pluitur" as but a synonym—a merely formal variant—of "Pluit." But as he, in recognizing thought, exhibits regularly a phenomenal perception of its *substance*, his indifference to the passive mandate to remodel *form* of thought, establishes but little probability that other language-users commonly refuse obedience.

be they words or sentences. It invites however confrontation with the kindred one-word active sentence "Pluit."

Realizing that my full interpretations of these one-word sentences have been extreme, if not extravagant, and little doubting that, in usual linguistic thought, analysis would be content if "Pluit" were interpreted as "Raining happens"—"Pluitur" as "Raining is effected (made to happen)"—I admit these meanings into an improvement of the tabulation offered on p. 62. Accordingly:

(1) { "Pluit"; "Raining puts on reality"; "Raining happens". }

(3) { .....; "Reality clothes raining"; ..... }

(2) { .....; "Reality is put on by raining"; ..... }

(4) { "Pluitur"; "Raining is clothed by reality"; "Raining is effected". }

This admitting is however incomplete—and that conspicuously. In (2) I do not put a final passive sentence, for the reason that I can't. In (3) I do not put a final active sentence —again because I can't. In (2) and (3) I have exhibited no one-word sentences, because I do not know of any. Nor do I blame myself for these omissions; for I don't believe they can be filled, my reason being this: (2) and (3) begin with an idea which is far too abstract. In its thinking, mind is taxed enough in passing from the concrete to the simplest abstract, as in "Yonder cloud is white," without augmenting difficulty by reversing its procedure. "Whiteness characterizes yonder cloud" has never been a favorite. In struggling to a vastly higher species of abstraction, the severity of effort is still greater. To increase it by beginning with abstraction is intolerable. "Ilium fuit" gives no promise of "Existence characterized," and less of "ceased to characterize Troy," although the latter paraphrases the translation "Troy is no more." "Reality clothes" or "is put on by raining" doubtless in linguistic practice never will be thought—much less expressed.

I conclude accordingly that "Pluit" has no corresponding passive—"Pluitur," no corresponding active.

SPECIAL INVESTIGATION OF BEING-DONE VERSUS DOING

The illusory conception of a passive "being-done," distinguished in imagination from the active "doing," is the root of so much evil in linguistic study, that perhaps it merits a more serious examination that was given it on pp. 1–2.

As this conception hardly can have tricked the mind of anyone more absolutely than my own, I can appreciate its plausibility. To illustrate, it would doubtless commonly be held that being-eaten is distinctly less agreeable than eating. Assuming properly enough that what is less agreeable is different from what is more so, I might readily conclude that being-eaten cannot be the same as eating.

Such conclusions are, however, dangerous unless more care is used in forming them. For instance, given "Brown is fond of salt" and "Jones objects to sodium chloride," difference in the tastes of different persons does not demonstrate a difference between the substance liked by one and that disliked by the other. Now "Eating (1) is agreeable" may be the verdict of the eater. "Eating (2) is disagreeable" may voice the disapproval of the victim. The difference between "agreeable" and "disagreeable" does not then require me to differentiate whatever may be meant by "Eating (2) (or "Being-eaten," which might take its place) from what presumably is meant by "Eating" (1).

Suppose however "Eating (1) is agreeable" and "Eating (2) is disagreeable" to be intended both as the opinions of one person—say myself. You do not necessarily suppose a contradiction. You may properly imagine that by "Eating (1)" I mean my eating something, while in saying "Eating (2)" I think of something's eating me. That is, the difference between occurrences respectively announced by "Eating (1)" and "Eating (2)" may be a difference only in the implications of participants in eating—not at all in the specific actions in which

they are implicated. Now "something's eating me" is understood to stand for an occurrence which I may correctly also call "my being-eaten by something;" and for this last expression I may substitute the pregnant "Being-eaten." What is true of "Eating (2)" may therefore equally be true of "Being-eaten." It appears accordingly that, while there is a striking difference between the *occurrence* indicated as a *whole* by "Eating (1)" and the *occurrence* indicated as a *whole* by "Being-eaten," the action-*element*-of-one-occurrence may not differ from the action-*element*-of-the-other. More generally speaking, I am thus far not obliged to think of action doubly—as sometimes a "doing" and at other times a different "being-done."

It might be expected that, when action and those implicated in it—say the actor and actee—are all distinctly named, the differentiation of a "being-done" from "doing" would not be attempted. But suppose for illustration "I shall be glad if Brown kills Jones" and "I shall be sorry if Brown is killed by Jones." What I'm glad of plainly should not be the same as what I'm sorry for. Accordingly again I'm ready for a dangerous assumption—that "being-killed" is different from "killing." Yet before adopting this assumption I'm again inclined to look about a little.

A brief examination of a simpler case may help me. Thus I note that "Brown killed Jones" exhibits Brown and Jones in the relation of slayer to victim; "Jones was killed by Brown" no doubt invites me to conceive the two in changed relation. In sensing this relation I am aided by the striking change in order of the terms. The thought itself has plainly been reversed. Inevitably also the relation has been modified. Some relation not expressed by "Brown killed Jones" is surely now expressed by "Jones was killed by Brown." That relation-difference is enough to adequately differentiate the passive sentence from the active. I am not very strongly tempted to imagine that their difference in total value must consist of difference between a killing and a being-killed.

In juxtaposing "Brown killed Jones" and "Brown was killed by Jones" I hardly fare so well. In the latter the persistence

of the order followed in the former disconcerts me. I may fail to note the great relation-change which change in order of the terms revealed in "Jones was killed by Brown." Blind to any difference in Brown's and Jones' respective implications in the act of killing, sure that Brown and Jones are each unchanged, but well aware that very different happenings are intended by the two expressions, I perhaps imagine that—I know not, care not, how—the killing was in one case (independently of its participants) unlike the killing in the other. Indeed, perhaps I go so far as to conceive these different killings as the one the other's opposite.

I do not intend to risk my peace of mind—perhaps my sanity—in any effort to establish with precision what I mean, or ought to mean, by "opposite." Enough that what it roughly indicates appears to be what is conceived by those who think of "being-killed" as different from "killing"—i. e. that "being-killed" must be about as far as possible from "killing"—"being-done" from "doing."

If, being cross-examined, I attempt to justify myself in my supposed imagining, I must imagine somewhat more distinctly. First then I dismiss such natural opposites to "kill"—or, say, deprive of life—as "not to kill," "to endow with life" and "to restore to life"; for these don't seem to help me very much. Indeed about the best that I can do is to suppose that while in "Brown killed Jones" the action, or in other words the out-put energy, was exercised in one direction—say from left to right, in "Brown was killed by Jones" it was put out in the opposite direction—say from right to left. I nominate then killings of two sorts, the one done forward and the other backward—say a prorso-active and a retro-active. Indeed, I half suspect these terms express with some precision the imaginary difference between a "doing" and a "being-done."

For this or any other difference the universe affords, I think, no precedent. To illustrate, take for an example action of the simplest order, motion rectilinear and horizontal, of a uniform velocity—beginning, say, with motion northward.

Within these postulated bounds, I cannot think of aught that differs from a northward motion, save a motion in a different direction—say northeastward. But this I cannot think of as a "being-done," distinct as such from northward "doing." I succeed no better if I box the compass with successive illustrations. In particular, a motion southward—the only "opposite" which I can think of—does not seem to me at all a backward northward motion, even less a "being-done" correlative to northward motion sensed as "doing." Contrariwise, and very clearly, motion southward does impress me also as a forward motion on its own account, and as itself a "doing"—quite as much so as a motion northward.

To illustrate more emphatically, I recall the flight of a meteor. Something the meteor "did"; or—if you like it better—energy of some sort, subject to the law of gravity, "did something" to the meteor. In this "doing" I can not conceive a genuine change, apart from unconsidered circumstances, save a change in the velocity or the direction of the motion. As variation in velocity is plainly not intended by the users of the passive voice, I heed direction only, noting that a change in it would merely, as I found above, develop another "doing" rather than a "being-done." Especially if the meteor reversed its course and, plunging from the earth, fled into space, I should by no means call this different flight a "being-done", but certainly an even more conspicuous "doing." For such a "doing" would run counter to the universal course of cause and effect. What we conceive as meteors do not—never will—reverse their flight, until creation shall retrace its steps. As in such reversal contact with the earth must antedate appearance in the sky, the half-delirious fancy voiced in "Backward! Turn backward, oh Time! in your flight" will then be realized. The marching hours, days and years will "about face." "The last shall be first; and the first shall be last."

If now the impressions of others tally with my own, it may be granted that ideas of action sensed as "being-done" distinct from "doing," cannot be derived from cosmic sources.

The like however may be argued also of, for instance, the conception of a fourth dimension. Though underivable from the external universe, we "make up" such ideas—"out of our own heads." I am not, therefore, ready to contend that we can not develop the idea of "being-done" distinct from "doing." I merely raise accordingly the question: Do we?

In answering I recognize that, under all the strain imposed—as I have sought to indicate—by picturing a worse than topsy-turvey world, my little mental strength may not forsake me; yet I don't believe in tempting Providence. Even if, whenever I use the passive voice, I can imagine the impossible, I shall not do so till I have to. In the meantime I am very sure I don't, and rather sure that others don't.

It is true that customary facile talk of "being-done" as different from "doing" indicates a mental differentiation of the two. This differentiation is however, as I sought to show, so vague that we might better say we think we have effected it, than we have actually effected it. On the other hand we may do what in its results so much resembles such a differentiation as to take its place, and be mistaken for it. For, although the course of motion always lies perforce from its beginning to its end, and never from its end to its beginning; and although in language practice it be not conceived *per se* except in that direction; it still is possible, and even easy, for the mind to choose its view-point either at the head of the motion-stream or at its foot—the latter view-point offering a different view. In the former station, looking down the stream, I sense the flow as from me. In the latter, looking up the stream, I sense the flow as toward me. In both these cases my idea of flowing takes in self, is relative to self, subjective, ego-centric. I no longer sense the flow *per se* alone, but also certainly *per me*. The question still remains however whether in fact we do so shift the mental view-point in the passive form of thinking.

In offering an illustration to assist the answering of this question, I make use of "come" and "go," intending them to indicate a single motion, fixed in absolute direction, but ob-

served from different points of view. Let then a given action be supposed to be correctly sensed and well enough expressed by "Jones went to Brown." In this expression motion, sensed by Jones—who is stationed at the head of the motion-stream—or sensed by me who stand in thought near Jones, is motion from himself (or rather his initial station) toward another person at the foot of the stream.

Thinking of the same occurrence now, but in the passive form, I start with Brown. If I wish to do so, I may also change the mental picture of the motion. But I must content myself with such a different picture as that same and unchanged motion offers from a different point of view. I must not—to get the different picture—change the motion. For instance, I must not reverse the motion-flow itself; I must not say "Brown went to Jones"—the statement of an altogether different occurrence, not at all the one I have in mind.

Remembering that I am to make no change in what I see, but only in the whence-I-see-it, I might shift my point of view to ..... anywhere you may imagine (say half-way) between beginning of the action and its end; but that would get me into trouble—I don't exactly know how much; for, to keep in simultaneous near-by view both Jones and Brown,* it seems to me that I should need to look in mind both up the stream to Jones and down the stream to Brown at once—to simultaneously sense the motion as approach (to me) and as departure (from me); and I'm not so sure that I can do it. So I shift my view-point to the foot of the motion-stream. That is, instead of looking now from head to foot of the flow and seeing the motion as a going, I look from the foot (the view-point of Brown) and see it as a coming.

If now I really were conceiving thus, I should express myself, with small consideration for the squeamishness of Grammar, by the sentence "Brown was come-to by Jones." This however I need not do; and ordinarily I should not even think

* That first and last terms of a thought at least must overlap in consciousness is indicated by for instance "A > B," of which I can not sense the > with either A or B not in my mind.

of doing it. If this investigation were not goading me to look for every possibility of thought-formation, I suppose that only one expression would occur to me—the simple "Brown was gone-to by Jones."

So too again, although a given motion may no doubt be sensed as either a leaving one place or a starting for another, had I said "I left Chicago for New York," I should not say in the passive voice "New York was started for by me from Chicago," but rather, with no shift in point of view, "Chicago was left by me for New York." I conclude accordingly that, while a change of view-point is in passive forms of action-thinking possible, and even eminently suitable, it does not in linguistic practice seem to be effected.

That there is no genuine thought of "being-done" distinct from "doing", Grammar might itself admit, if taken unawares. To illustrate, in the sentence "Jones was struck by Brown," the subject Jones is said to "suffer" what the passive indicates. I ask the question: "Suffer in particular what?"; and even from the devotee of Grammar I expect the answer "striking." It hardly will occur to him to mention what Jones suffers as a "being-struck." Being off his guard, presumably he will no more imagine any difference between the actions named by "being-struck" and "striking," than between the actions named in "Herod's slaughter of the innocents" and "slaughter of the innocents by Herod." Or would he recommend "the *being slaughtered* of the innocents by Herod?" Or, prompted by a true-to-fact interpretation of "the murder of Lincoln" as a murdering him, must we renounce the expression "Lincoln's murder" and compel ourselves to "Lincoln's being-murdered?"

Again, in "Jones was struck by Brown," grammarians speak of Brown as the *agent* of the passive voice, by which I understand the doer of the action indicated by the passive verb. Now were I to put to a grammarian this question: "What did Brown accomplish or perform or do?", I hardly am prepared to be informed that Brown accomplished or performed or did a

"being-struck." I expect, instead, a "striking"; I expect a semiconscious acceptation of this proposition: agents—that is, doers—do only "doings." "Being-dones," then, simply are not done.

Madison, Wis., June, 1910.

THE ANTI-AUCTION MOVEMENT AND THE NEW YORK WORKINGMEN'S PARTY OF 1829

HORACE SECRIST.

The following paper is a part of a larger investigation of the Anti-Auction Movement. This study was undertaken primarily to test the assertion made by some students of the early American Labor Movement that the Workingmen's Party of New York City was a direct outgrowth of the Anti-Auction Movement of 1828.

The sale of goods at auction even in large quantities during the period 1812 to 1830 was common to all the larger cities along the Atlantic coast. The chief center, however, was New York City. Before 1812 such sales had created no alarm, for the importing and retail business was chiefly in the hands of home merchants. Goods were generally of uniform quality, and the importers responsible men.[1] But by 1828, sales had passed into the hands of foreigners,[2] or their agents, who took advantage of the loose methods at the custom houses, of the facilities for undervaluation, of long time credits for custom-duties, etc., and the practice became oppressive.[3] The first determined stand taken against the auctions by New York City was in 1828; although protestations had been registered in meetings as early as 1802,[4] and memorials frequently addressed to Congress on the subject in 1817, 18, 19, 20, 21, and 1824.[5] These memorials had not borne definite fruit, although they had put Congress in possession of the facts, and had created consid-

1 Remarks upon the Auction System, etc., p. 8.
2 Three-fourths–four-fifths of import trade in the hands of foreigners, Niles Register, Vol. 35, p. 209, Nov. 29, 1829.
3 Goss: Tariff Administration in the United States, p. 37.
4 New York American, Jan. 16, 1829, p. 2, col. 3.
5 Workingmen's Advocate, Dec. 12, 1829.

erable interest there. On May 13, 1828, McDuffie, Representative from New York, wrote that he was of the opinion that "a majority of the Committee on Ways and Means" were in favor of a National tax on auctions.[6]

The anti-auction movement proper, in New York City, began in the spring of 1828. The chief causes for renewed interest at that time seems to have been the agitation in 1827, and following, by New York, Pennsylvania, as well as New England *en bloc,* for additional tariff legislation; the pending bank legislation in New York, and the dumping policy of England whereby her surplus manufactured products of the Napoleonic period were poured in upon our markets. New York, although she favored increased protection—at least the protection that should have come as a result of the Tariff of 1824, if correctly and honestly administered, thought it useless to increase the tariff schedules so long as frauds on the revenue continued and auctions sales predominated. The particular demand, therefore, was for the removal of frauds—which they thought would result if customs were paid in cash—and a national tax of ten per cent imposed on auction sales.

The class of people most directly affected were the merchants, who were thrown into competition with the foreign producer, with his accumulated lot of goods, and his superior methods of dyeing and weaving. Accordingly, in the early part of May, 1828—after the passage of the Tariff of 1828, from which they had hoped for relief, and before the passage of the law of May 28, 1830, providing for the collection of revenue[7]—meetings were called for the purpose of formulating reasons for the abolition of the auction system, and for petitioning Congress. The most important and the one which started a positive policy was a "respectable meeting of citizens," May 2, 1828.[8] The presiding officer was Thomas H. Leggett, a merchant.[9] Resolutions were offered by Daniel Jackson, a merchant, and a committee of eighteen appointed.[10] This committee was afterwards

[6] Boston Palladium, May 13, 1828, p. 2, col. 3.
[7] Goss: p. 41.
[8] Niles Register, Vol. 34, p. 174.
[9] N. Y. City Directory, 1828–1829.
[10] 13 of the 18 are known to have been merchants.

known as the New York Anti-Auction Committee. In June it submitted a report called, "Reasons Why the Present Auction System Should be Abolished."[11] Summarized, they are as follows:

1st, Auctions are a monopoly[12] which crushes the middle class and divides the people into rich and poor.

2nd, Auctions tend to concentrate trade in a few cities.

3rd, They are destructive to domestic manufacturers, merchants, and to the market in general. They remove all inducements to excel, and cause rapid fluctuations in prices.

4th, They make it possible for one state to tax another: the taxing power should be in the hands of the Central Government.

5th, They make the sale of contraband goods easy.

6th, They are pernicious to internal trade.

7th, They injure consumers generally by enhancing the price,[13] and induce dealers to handle inferior goods.

8th, They create unnatural competition and encourage overtrading.

9th, They produce the "pernicious effects of gambling" due to rapid changes in price.

10th, They facilitate fraudulent bankruptcies, while the auctioneers "form a monied aristocracy, influencing the banks, controlling by the fear of their displeasure, the free expression of public opinion, and are hostile to the genius of republican government."

These "reasons" certainly smack of mercantilism, and are typical for the period 1812 to 1830. A definite program was not outlined at this time, but at a "large and respectable meeting of mechanics and citizens,"[14] October 10th, 1828, called by the Anti-Auction Committee, pursuant to a resolution made in May,

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[11] Niles Register Vol. 34, p. 258. Also in pam. form in Wis. Hist. Library.

[12] In 1829, there were 56 state-appointed auctioneers in N. Y.

[13] The state fixed the number. N. Y. American 1/16/29, p. 2, col. 1. See an interesting discussion between Mercator, "a consumer", and McDuffie, N. Y. AM. Jan. 2-3-6-9-10-12-17, 1829.

[14] N. Y. Ev. Post Oct. 14, 1828, p. 1, col. 5-2000-2,600 present, ibid. Oct. 21, 1828.

1828, giving them power to call such meetings as they saw fit, a definite program was decided upon. Three men were nominated [15] for Congress on an independent ticket,[16] and specific plans laid [17] for capturing the vote in the November election. The chairman was Henry I. Wycoff [18] and the secretaries, Richard E. Mount, a manufacturer,[19] and George H. Stanton. Resolutions were drawn up which embodied the ideas of the earlier reports of the committee, and appeal made to "every honorable merchant and good citizen" to unite in a cordial and simultaneous effort to check its (auction's) operation." In addition, a tax of 10 per cent was asked for until the system was "so far changed as no longer to oppress the fair and regular trader." [20] The committee maintained that the sentiment against the system was practically unanimous; that the movement would be pursued without the slightest reference to tariff opinions or party politics; [21] that the merchants were the classes most affected, etc.[22] The last point is clearly enunciated in the speeches which followed the adoption of the committee's report.[23] However, appeal is made to the "great and influential body of mechanics" whose interests "are closely bound up with ours" (the merchants.)[24]

The three men first chosen as candidates for congress were Messrs. Walter Browne, David B. Ogden, and Campbell P. White. Browne and White declined the nomination, because it

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15 Niles says, Vol. 35, p. 147, that it was the mechanics who did the nominating. This, I think, is an error.

16 The ticket is "totally aloof from party distinctions and composed of men who have pledged themselves to pursue all honorable means to remove and abolish a monopoly—etc." Anti-Auctioneer, Nov. 1/28, p. 2.

17 Their earlier reports had been circulated throughout the Atlantic States.

18 Afterwards prominent in the Loco-Foco Party: Hist. Loco F. Party, p. 15.

19 N. Y. City Directory, 1828–1829.

20 N. Y. Evening Post, Oct. 14, 1828, p. 1, col. 5.

21 "We have no party, no political creed, and no party man will get our votes unless he opposes the continuance of the present auction system." N. Y. Evening Post. 10/21/28, p. 2, col. 2.

22 Ibid. It would be folly to send men to congress, so that it would make it possible for "our opponents to say that we do not represent the opinion of the mercantile men of the city of N. Y."

23 Ibid.

24 Ibid.

was made without their consent and in an irregular manner.[25] Ogden was a counsellor at law, and White a merchant; both were supported by Burns, who seconded their nomination on the ground of their being "essentially commercial in their pursuits." "We have deemed it most proper and in accordance with your feelings to propose to you men, a majority of whom, from their habits of life, have devoted their thoughts to commercial subjects. . . ." [26]

Walter Browne was sincere in his refusal of the candidacy and somewhat later Thomas C. Taylor, "selected from the great and respected body of mechanics" [27] was named in his stead. The ticket then stood Ogden, a counsellor at law, White, a merchant, and Taylor, a mechanic.

A committee [28] of fifty [29] was appointed for the purpose of circulating memorials and getting signatures. All of the memorials asked for a ten per cent tax on auction sales. "Your memorialists persuade themselves that your Honorable Bodies will interfere to correct the evils resulting from the system—a system which in its more immediate effects, encourages fraud on the revenue, depresses domestic manufacture, facilitates impositions on the public, destroys the mercantile character, and is ruinous to that class of citizens to which your memorialists belong, and the injurious results of which ultimately fall upon the agricultural and the laboring part of the population. They therefore respectfully pray your Honorable Bodies to impose a duty of ten per centum on sales by auction, excepting the effects of bankruptcies, and of deceased persons, goods sold for the benefit of underwriters, shipping and real estate." [30]

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[25] New York Even. Post Oct. 17, 1828, p. 1, col. 1—"as members of the Republican family, and supporters of its usuages and systems, we can accept of no nomination, unless made in the usual and regular manner."

[26] This is pretty clear evidence that Brown was a merchant.

[27] N. Y. Evening Post, Oct. 31, 1828, p. 2, col. 4.

[28] This committee was not to supplement the Anti-Auction Committee.

[29] Of this committee thirty are known to have been merchants, and manufacturers, chiefly merchants. There were two mechanics. Of the others, I cannot say.

[30] N. Y. Even. Post Nov. 4, 1828, p. 4, col. 1. On Dec. 10, 1828, a memorial, signed by 10,000 citizens of N. Y. was presented to congress and asked for the 10 per cent tax. On Dec. 15, 1828, one was presented which carried 7,600 signatures. Niles Reg. Vol. 35, p. 255, 271.

Between October 10, 1828, and November 4, 1828,—the date of the election, the committees began the publishing of the Anti-Auctioneer, a newspaper, devoted to their interests and through its columns they pointed out the baneful effects of the connection of auctions and the banking monopoly, and justified their turning away from the old parties whose candidates had refused to declare against auctions.[31] They appealed to all classes to support their candidates. The "Mechanics and Cartmen of New York;"[32] "The Mechanics;"[33] "The Weavers,"[34] and "The Book-sellers, Printers and Book-binders[35] were addressed in particular.

A surprising unanimity of feeling existed against auctions. Manufacturers, merchants, and mechanics worked side by side.[36] However, there were some who looked upon the system as a "kind of labor saving machine no less important in the business of buying and selling than the water mill or steam engine in the business of manufacturing. . . . The inland merchant who buys his sugar, molasses, iron, etc., on the wharf at public sale, prevents, and therefore saves, the cartage, warehousing, breakage, waste, insurance, interest, jobbers' profits, and the bad

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By Dec. 23, 1828, petitions coming from N. Y. City alone had the combined signatures of 22,000 persons. N. Y. Even. Post for the Country, Dec. 23/28, p. 3, col. 4.

[31] Anti-auctioneer Nov. 1, 1828, (copy) p. 5. It appears that their hostility was aimed at Cambreling, in particular, who in an informal way had assured three members of the Anti-Auction Committee that he was opposed to auctions. But to make sure, a letter was addressed to him by five of the Committee members; Cambreling ignored it. This precipitated the break. The controversy appears in full in the N. Y. Even. Post, Oct. 24, 1828, pp. 2 and 3; and Oct. 28, p. 1, ffl.

[32] "You have a common interest with the merchant. Now the merchants are, and have been for years groaning under an oppressive auction monopoly. The merchant asks of you no sacrifice of political principle. . . . To your sense of justice—do they appeal for assistance. . . . Shall the head suffer and not the members also?" signed "Mercator" Anti-Auctioneer, Nov. 1, 1828, p. 12 (copy).

[33] "Wealth and authority are running your trades, men who ought to represent your interests are seeking their own advancement only. —Campbell P. White, Thomas C. Taylor, and David B. Ogden, are the Anti-Auction candidates; support them and all will be well." Signed "Fulton," ibid.

[34] "Perhaps more than any other class of laboring citizens, the weavers are interested in putting down the auction system," ibid. p. 13.

[35] "To the polls, then I say go. Vote for the Anti-Auction ticket, and all will be safe." Signed "Franklin."

[36] N. Y. Morning Herald Mar. 4, 1820, p. 2, col. 1.

debts on private sale in excess of those of public sale." [37] Others looked upon them with favor because they quickened sales and did away with the middleman, etc.[38]

The chief objections to curtailing the auction monopoly were political and fiscal. The auctioneers were wealthy men, closely connected with the banks and other fiscal agents, and it was politically dangerous for Cambreling and others to pledge themselves against auctions. As for relief in the state legislature, that was next to impossible.[39] The state tax of one and one-half per cent, brought into the treasury about $250,000 annually, and there appeared to be no other source of revenue in case this one were cut off.[40] This was the reason assigned by Cambreling and Verplanck in 1828,[41] for not opposing the system; and it was said to be something demanding serious consideration, in Governor Martin Van Buren's message to the Legislature, January 6th, 1829.[42] The committee report on the Governor's message emphasized the same consideration; [43] while the New York Evening Post thought that the election of the Anti-Auction men would "destroy an immense trade which attracts thousands of merchants from the north, south, east and west, and gives additional employment to nearly two hundred thousand merchants, traders, carmen, shipwrights, boat-builders, etc.," [44] as well as take from the state a revenue of approximately $300,000 a year which is being so well spent.[45]

The vote is very interesting. White was common to the Anti-

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[37] N. Y. Evening Post Nov. 7, 1828, p. 1, col. 2. Communication signed "Shipowner."

[38] N. Y. Am. Jan. 3 and 10, 1829, pp. 2 and col. 4 and 6, respectively, "A consumer."

[39] N. Y. American, May 13/29.

[40] See table at end of paper. (Appendix "B.")

[41] Anti-Auctioneer Nov. 1, 1828, p. 4 (copy).

[42] "It is respectfully submitted, whether the amount of revenue derived from this source by the state: the valuable purpose for which it is appropriated, and the difficulties of supplying its place, should not induce you to consider whether measures may not be adopted by you, which, while they may save the interest of the state, would at the same time, respect those of the complainants." N. Y. American Jan. 7, 1829, p. 2, col. 2.

[43] N. Y. Even. Post, Feb. 17/29, p. 4, cols. 4 and 5.

[44] Ibid. Nov. 4/28, p. 1, col. 2.

[45] The revenue was used to support hospitals, foreign poor, orphan asylums, and to keep up the Canal fund. N. Y. Am. Jan. 7/29, p. 2, c. 2.

Auction and Republican tickets.[46] According to a map of New York City, 1853, Pearl street,—the street where most of the merchants in the Anti-Auction committee as well as the Committee of Fifty had their places of business—runs approximately parallel with Broadway and East River, touching Broadway at both ends. As the wards of the city are marked in this same map, Pearl street traverses the first, second, fourth and sixth wards. It is here that we should suppose the Anti-Auction vote to be strongest. The total vote was White, 18,070; Ogden, 11,204; Taylor, 10,974. The vote more in detail is as follows:

Wards.	Order of Importance.			Total Vote %.			Vote, % of Population.		
	Taylor.	White.	Ogden.	Taylor.	White.	Ogden.	Taylor.	White.	Ogden.
1.....	1	7	2	31.81	36.60	31.59	9.93	11.42	9.86
2.....	4	12	4	31.98	35.44	32.58	11.20	12.40	11.40
3.....	8	13	8	31.69	35.20	33.11	8.31	9.23	8.69
4.....	7	9	7	28.48	42.44	29.08	6.55	9.75	6.68
5.....	5	6	5	27.73	43.05	29.22	4.91	7.62	5.17
6.....	12	8	12	23.81	52.13	24.06	3.38	7.41	3.42
7.....	10	3	10	23.72	52.07	24.21	4.40	9.66	4.49
8.....	2	1	1	26.55	46.48	26.97	6.61	11.57	6.71
9.....	3	2	3	27.40	45.01	27.59	4.37	7.18	4.40
10.....	6	4	6	26.19	47.34	26.47	5.08	9.18	5.13
11.....	13	5	13	22.68	54.73	22.59	3.68	8.89	3.67
12.....	14	14	14	21.37	56.86	21.77	2.25	5.99	3.29
13.....	11	11	11	27.36	45.13	27.51	5.42	8.94	5.45
14.....	9	10	9	26.82	46.36	26.82	4.99	8.63	4.99

From the foregoing table it appears that the four wards in which Taylor, the mechanic, received his greatest numerical vote were the first, eighth, ninth and second, in the order named; while the four wards which gave him the largest percentage of the total vote cast in any ward were, in the order named, the second, first, third and fourth. That is, the first and second wards gave him the largest numerical as well as the largest relative vote. As for White, the merchant, the four wards in which he received his greatest numerical vote were, in the order named, the eighth, ninth, seventh and tenth; while the four wards in which he received his largest relative vote were, in the order named, the twelfth, eleventh, sixth, and seventh. That is, no marked concentration appears. The vote for Ogden, the

[46] He ran with Cambreling & Verplanck on the Republican ticket. N. Y. Even. Post Oct. 17, 1828, p. 2, col. 1.

lawyer, was not unlike Taylor's. He received his greatest numerical vote in the eighth, first, ninth and second, in the order named; and his greatest relative vote in the third, second, first and fifth, in the order named. That is, the first and second wards, as in the case of Taylor, gave him both the largest numerical and relative vote. The first five wards were mercantile and it is in them that at least two of the candidates received their greatest support.[47]

Although none of the candidates was successful, the leaders of the movement considered the election at least a partial triumph. At a meeting, May 9, 1829, called by the Anti-Auction Committee, the progress of the work was reviewed in an elaborate report read by Jonathan D. Steele. It was related that some fifty memorials from different parts of the United States had been received by Congress; that Congress had reported a bill;[48] which, however, was not passed because of the rush of business, that, "many members of Congress, not being merchants were ignorant of the forms of mercantile business, and, consequently, had but imperfectly understood the evils of auctions."[49] It was further observed that, "It will require but a few years longer to force men of capital out of trade; to extinguish that intermediate class of wholesale dealers, which is as essential to the freedom of commerce as the middle ranks generally are to political liberty. . . ."[50] Resolutions of the typical sort were adopted and spoken to by Messrs. James Auchincloss, M. Disosway, Lewis Tappan, Daniel Jackson, and John E. Hyde, all merchants.

The next Anti-Auction meeting of importance was December

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[47] N. Y. Amer. May 13, 1829. Jonathon D. Steele, Sec. of an Anti-Auction meeting, May 8th, 1829, says "We are proud to publish to all our constituents that in the first, second, third, fourth and fifth wards of the city, where the commercial and trading classes principally reside, the anti-auction candidates had a great preponderance. They polled 14,655 votes, while our opponents polled only 13,966."

[48] This was not satisfactory to the merchants in Washington, who had come there from N. Y. and other places to watch their interests. A substitute measure, which, it was hoped would conserve the rights of the manufacturers, mechanics, and merchants, was drawn up, but was not reported. N. Y. Am. May 13, 1829.

[49] N. Y. Amer. May 13, 1829.

[50] Ibid.

8, 1829. The presiding officer was an appraiser, and the two secretaries and chief speaker, merchants.[51] Resolutions covering frauds, etc., were prepared, and it was further "Resolved, That these evils are continually increasing, and unless speedily and effectually checked, threaten to involve the mechanics, merchants and manufacturers in one common destruction." [52]

This takes us through the part of the New York Anti-Auction struggle which assumed a political character. We are forced to conclude that this was only a segment of a larger movement; that it came about as a result of a variety of causes, chief of which were the importance of New York City as an importing center; to frauds upon the revenue due to lax custom regulation; to the policy of granting credits for custom duties; to the dumping policy of England; to the monopoly which the state fostered; to the unwillingness of New York to give relief to the merchants, because of the revenues from auction sales; to the refusal of the regularly nominated candidates of the old political parties to pledge themselves; and finally to the determination of the mercantile class to stand together for the redress of their grievances.

Now passing to the other half of this paper, viz., the Workingmen's Party and its connection with the Anti-Auction Movement, we find a decidedly different set of circumstances.

The Workingmen's Party was started in a general meeting [53] April 23, 1829, for the purpose of protesting against a change in the length of the working day. A Committee of Fifty, to supervise the general movement was appointed at a meeting, April 28, 1829, and reported at a meeting Oct. 19, 1829. At the October meeting Isaac Odell [54] was chairman and the Secretaries were Wm. G. Tillow and Robt. D. Owen.[55] In the Report no mention was made of the ten hour day, but the things

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51 Workingmen's Advocate, Dec. 12, 1829, p. 3, col. 4; also Niles Reg. Vol. 37, p. 303, Jan. 2, 1830.

52 Workingmen's Advocate, Dec. 12, 1829, p. 3, col. 4.

53 Morning Courier, Apr. 25, 1829 (copy).

54 A Carpenter. N. Y. Directory, 1828–29.

55 Owen says that he was unacquainted with the purpose of this meeting and went to it as a stranger. Workingmen's Advocate Oct. 31, 1829 (copy), also N. Y. Spectator Oct. 30, 1829, p. 1.

contended for were equal education, equal rights to the soil, etc. Monopolies in all forms were inveighed against and chiefly those seen in banks and auctions [56] because of their close affiliation.[57] The aversion to auctions *per se* was, however, secondary,[58] as is shown by the absence of all mention of them in the Prospectus [59] as a topic to be given consideration by the Workingmen's Advocate, their official paper. Banking monopolies, however, were given specific mention.

At a meeting, Oct. 26, 1829, the working men entered the political field by nominating candidates for the State Legislature. Their names and occupations,[60] so far as known, are as follows:

For the Assembly.		For the Senate.	
Name.	Occupation.	Name.	Occupation.
Ming, Sr., Alex,.....	Printer	Wood, Silas J., ...	Merchant
Friend, Frederick.....	Brass founder	Webb, Ed. J.,.....	Carpenter
Skidmore, Thomas,.....			
Blatckly, Cornelius.. ..			
Kerrison, Robt. M.,.....	Stockmaker		
Potter, Alden, ...	Machinist		
Williamson, Amos,.....			
Whiting, Ebenezer.....	Teacher		
Clarmon, Simon,.....			
Ford, Ebenezer,.....	Carpenter		
Mott, Benj.....	Grocer		

There is a striking similarity in the votes of the candidates for the Assembly. Ford, who was elected, received 6,166 votes; while each of the ten remaining candidates, with one exception, got 6,000 and over; six of these getting over 6,100. Numerically, all Assembly candidates were strongest in the 10th ward;

[56] "One dozen auctioneers receive of New York more than a million dollars annually over and above all their expenses, for their personal services. The thing to do is to break down the auction monopoly." Workingmen Advocate Oct. 31, 1829.

[57] Ibid. Jan. 16, 1830.

[58] Auctions are denounced but are put in a category of institutions "contrary to the genius of republican institutions" alongside of "chartered banks . . . and clerical exemption from taxation." Ibid. Oct. 31, 1829 p. 3, col. 4.

[59] Ibid. Oct. 31, 1829, p. 3, col. 1.

[60] The Workingmen's party "consisting as well of merchants, lawyers, physicians and speculators, as of operatives under the general cognomen of working men. Hammond, Hist. of Pol. Parties, etc., Vol. II, pp. 330–331; also Jenkins Pol. Parties in N. Y. pp. 368–369.

2nd strongest, in the 8th ward; 3rd strongest, with two exceptions in the 9th ward; 4th strongest, with one exception, in the 11th ward; and 5th strongest, with one exception, in the 13th ward. The remainder of the vote was as uniformly divided. When the vote polled is compared with the population,[61] the wards, in order of importance, were 10th, 8th, 13th, 11th and 14th wards. The vote for Mr. Webb, the carpenter, for the Senate, follows very closely the vote for the Assembly ticket. The vote for Mr. Wood, the merchant, is very different. The wards for these candidates were in order of importance.

Absolutely.		Relatively.	
Wood.	Webb.	Wood.	Webb.
8th	10th	1st	13th
1st	13th	3rd	10th
9th	8th	2nd	11th
10th	11th	8th	8th
5th	9th	13th	14th

Mr. Webb was strongest both absolutely and relatively in the 13th, 10th, 8th, 11th and 14th; the same wards in which the assembly candidates were strongest. Mr. Wood, on the other hand, was strongest both absolutely and relatively in the 1st, 3rd, 2nd, 8th and 9th; that is in the same wards which supported the merchants' Anti-Auction candidates in 1828.

A peculiar overlapping of candidates appears in 1829, and furnishes an interesting comparison. Mr. Ogden was an Anti-Auction candidate in 1828; he was a Republican candidate in 1829. Mr. Wood, the Workingmen's candidate in 1829 was also Mr. Ogden's running mate on the Republican ticket in 1829. The votes for these men at the two periods absolutely and relatively are as follows:

[61] The population of voting age for N. Y. City was not available. The total population, however, can be used with comparative safety, because, as Appendix "A" at the end of the paper shows, the possible vote was not widely different in the different wards.

Ogden.				Wood.	
Anti-Auction 1828.		Republican 1829		Republican & Workingmen 1829.	
Absolutely.	Relative.	Absolutely.	Relative.	Absolutely.	Relative.
8th.	2nd.	2nd.	2nd.	8th.	1st.
1st.	1st.	5th.	1st.	1st.	3rd.
9th.	3rd.	1st.	3rd.	9th.	2nd.
2nd.	8th.	8tn.	5th.	10th.	8th.
5th.	4th.	9th.	8th.	5th.	13th.

This seems to show that the vote for Ogden, as a Republican in 1829 was not unlike his vote as an Anti-Auction candidate in 1828 both absolutely and relatively; while the vote for Wood as a candidate for both the Republican and Workingmen's tickets in 1829 is very similar to the vote for Ogden in both 1828 and 1829.

My conclusion from this analysis is that the Workingmen's candidates, who in the main were workingmen, drew their support from a definite and compact area of the city, roughly the 13th, 10th, 11th and 14th wards; while their coalition merchant candidate drew his support from an entirely different section of the city, roughly, the first five wards; i. e. the district that supported the Anti-Auction ticket in 1828.

Encouraged by the election of one of their men, which they took more or less as a complete victory, they adopted a general plan for organization at a meeting of "mechanics and other Workingmen, etc.," Dec. 29, 1829. Elaborate resolutions were adopted on the subject of monopolies—including banks and auctions. It is here that we find the first real labor argument against the system; but even here it is coupled with banking monopoly, etc.

"Resolved: That the present auction system, which operates as a means of oppressing the producing classes, by introducing large quantities of the products of labor of foreign countries, which otherwise would be furnished by our own mechanics, is fraught with alarming evils, and should be immediately restricted.

"Resolved: That this system is most decidedly injurious to

the mechanics' interest of this city, compelling them in many cases, to abandon their business or dishonestly manufacture very inferior goods for the competition of the auction room.

"Resolved: That the credit system on duties at our custom houses, which furnishes the auctioneers and foreign importers with an additional capital of fifteen million dollars, at all times in this city, the greater part of which is drawn from the producing classes, they being the consumers, is an evil of immense magnitude, and demands our immediate attention.

"Resolved: That the banks under the administration of the present directors [62] and officers, and by the concert of auctioneers and foreigners aided by custom house credits, form a monopoly that is hostile to the equal rights of the American merchant, manufacturer, mechanic and laboring man; and that the renewal by the Legislature of the charters prayed for will — perpetuate an aristocracy which eventually may shake the foundations of our liberty and entail slavery on our posterity." The proposed remedies were: 1st, duties to be paid in cash; 2nd, charters of banks controlled by monopolies to be allowed to expire, and, if the banks be needed that part of the directors be named from the producing classes; 3rd, heavy duties on sales at auction—to be levied at least for some time to come.[63]

At this same meeting a General Executive Committee was appointed for the purpose of coordinating the movement in the various wards of the City. This is the second Committee of Fifty. The names of the first are not available, but the names and occupations of the second are given in the Workingmen's Advocate.[64] With few exceptions it was composed of workingmen, none of whose names, however, appear in the Anti-Auction Committee of Fifty nor the New York Anti-Auction Committee of Eighteen.

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[62] Every auctioneer "it is believed" is a bank director and that money is distributed from Wall street at the discretion of bank directors and auctioneers. Workingmen's Advocate, Jan. 16/30.

[63] "Our legislature was adjourned, after passing 387 acts during a session of 106 days. Among these acts is one providing for an equal system of education, for the abolishment of imprisonment for debt, . . . for amending the present monopolizing banking and auction system"—Editorial: Workingmen's Advocate Apr. 17, 1830, p. 3, col. 2.

[64] Mar. 20, 1830, p. 3, col. 4.

Of the subsequent history of the Workingmen's Party it is unnecessary to speak in this connection, except to say that all antipathy to auctions *per se* was swallowed up in the struggle for common schools, mechanics' lien law, abolishment of imprisonment for debt, etc.

To summarize, we find in New York City in the years 1828–1830 two distinct, though contemporaneous movements. The one was the dramatic incident of a movement extending as far back as 1815 in New York City and in a general way to all the cities of the Atlantic coast. It was a mercantile movement, led by mercantile men and was opposed to auctions, not because of any natural rights theory, or primarily because auctions were a monopoly, but because they were inimical to the trader's interest, to his welfare as a business man. It took the forms it did in 1828, because of a variety of events previously enumerated, and though it seemed to have failed at the most propitious moment, still lived on until the evils complained of were removed. The other movement was industrial in its inception, and addressed itself to the questions which emphasized the difference between rich and poor—bank, education, auction, and land monopolies. It attacked auctions because they were monopolies, and the auctioneers connected with the banks; not because they were inimical to the trader, the jobber and the commission merchant. The merchant appealed to the mechanics' interest because he had "fish to fry"; in the same way did the workingman appeal to the merchant. This appeal, however, is the only common grounds between the two movements.

APPENDIX "A."

COMPARATIVE TABLE OF

Wards N. Y. C.	Index of Importance.	Anti Auction Vote 1828.			Republican Vote 1829.		Workingmen's Party Vote 1829.												
		Taylor, %.	White, %.	Ogden, %	Ogden, %	Wood, %.	Wood, %.	Webb, %.	Ming. %.	Friend, %.	Skidmore, %.	Blatz, %.	Kerr, %.	Potter, %.	Will. %.	White, %.	Clarmon, %.	Ford.* %.	Mott, %.
1.....	Per cent of importance.....	10.25	7.16	10.00	12.64	10.36	10.36	2.81	2.87	2.85	2.73	3.14	2.85	2.86	2.84	2.84	2.87	2.86	2.90
	Per cent of total population.	9.93	11.42	9.86	2.36	8.73	8.73	1.27	1.55	1.54	1.48	1.32	1.54	1.54	1.54	1.54	1.53	1.55	1.54
2.....	Per cent of importance.....	8.36	5.63	8.35	14.43	6.21	6.21	2.07	1.79	1.76	1.76	2.07	1.76	1.76	1.75	1.75	1.75	1.75	1.75
	Per cent of total population.	11.20	12.40	11.40	3.73	7.23	7.23	1.29	1.34	1.32	1.32	1.21	1.30	1.32	1.32	1.32	1.28	1.32	1.29
3.....	Per cent of importance.....	7.31	4.93	7.48	7.12	7.62	7.62	2.54	2.77	2.75	2.80	2.23	2.77	2.78	2.76	2.79	2.79	2.77	2.61
	Per cent of total population.	8.31	9.23	8.69	1.56	7.53	7.53	1.35	1.76	1.75	1.78	1.11	1.75	1.76	1.76	1.78	1.74	1.77	1.64
4.....	Per cent of importance.....	7.53	6.86	7.58	7.97	4.50	4.50	3.57	3.24	3.25	3.26	3.98	3.25	3.28	3.23	3.23	3.26	3.23	3.28
	Per cent of total population.	6.55	9.75	6.68	1.33	3.38	3.38	1.44	1.57	1.57	1.57	1.50	1.56	1.58	1.57	1.57	1.56	1.57	1.57
5	Per cent of importance.....	7.93	7.48	8.19	12.97	8.38	8.38	6.79	6.38	6.26	6.49	6.29	5.99	6.40	6.43	6.44	6.50	6.39	6.52
	Per cent of total population.	4.91	7.62	5.17	1.55	4.51	4.51	1.96	2.21	2.17	2.25	1.70	2.06	2.21	2.23	2.24	2.21	2.22	2.22
6.....	Per cent ot importance.....	5.24	6.97	5.19	6.32	5.29	5.29	6.21	5.55	5.61	5.60	6.12	5.61	5.58	5.63	5.62	5.70	5.60	5.58
	Per cent of total population.	3.38	7.41	3.42	.79	2.97	2.97	1.87	2.01	2.03	2.02	1.72	2.01	2.01	2.04	2.04	2.02	2.03	1.98
7.....	Per cent of importance.....	6.35	8.46	6.35	6.60	5.52	5.52	6.42	5.24	5.29	5.28	6.58	5.32	5.34	5.29	5.32	5.32	5.29	5.29
	Per cent of total population.	4.40	9.66	4.49	.88	3.33	3.33	2.08	2.03	2.05	2.05	1.99	2.05	2.07	2.06	2.07	2.02	2.06	2.02
8.....	Per cent of importance.....	10.19	10.84	10.14	9.19	10.88	10.88	12.23	13.92	13.88	13.92	14.95	14.00	13.88	13.90	13.85	13.92	13.85	13.84
	Per cent of total population.	6.61	11.57	6.71	1.15	6.13	6.13	3.73	5.05	5.04	5.05	4.23	5.04	5.02	5.06	5.04	4.95	5.05	4.95

9.....	Per cent of importance.....	8.96	8.94	8.84	8.02	10.03	10.03	10.09	11.72	11.78	11.75	9.06	11.72	11.69	11.74	11.72	10.78	11.79	11.66
	Per cent of total population.	4.37	7.18	4.40	.76	4.25	4.25	2.30	3.20	3.22	3.21	1.93	3.17	3.18	3.21	3.21	2.89	3.23	3.13
10.....	Per cent of importance.....	7.61	8.35	7.54	4.62	8.73	8.73	14.03	13.99	14.06	13.98	14.85	14.03	13.98	13.93	13.94	13.96	14.06	13.94
	Per cent of total population.	5.08	9.18	5.13	.60	5.07	5.07	4.37	5.23	5.26	5.23	4.32	5.20	5.21	5.22	5.22	5.11	5.27	5.13
11.....	Per cent of importance.....	5.00	7.33	4.88	1.93	7.40	7.40	11.51	11.36	11.50	11.41	10.00	11.48	11.28	11.41	11.38	11.63	11.47	11.35
	Per cent of total population.	3.68	8.89	3.67	.28	4.74	4.74	3.96	4.68	4.74	4.70	3.21	4.70	4.64	4.72	4.70	4.70	4.75	4.60
12.....	Per cent of importance.....	2.44	3.95	2.44	1.08	1.12	1.12	1.70	1.73	1.71	1.72	2.04	1.72	1.71	1.70	1.69	1.71	1.70	1.65
	Per cent of total population.	2.25	5.99	2.29	.19	.90	.90	.73	.89	.88	.88	.82	.88	.88	.88	.88	.88	.88	.84
13.....	Per cent of importance.....	6.25	6.26	6.16	2.64	7.38	7.38	12.26	10.42	10.40	10.30	12.16	10.52	10.45	10.41	10.42	10.64	10.36	10.55
	Per cent of total population.	5.42	8.94	5.45	.44	5.55	5.55	4.96	5.05	5.05	5.00	4.60	5.06	5.05	5.06	5.06	5.05	5.05	5.04
14.....	Per cent of importance.....	6.53	6.85	6.39	4.48	6.08	6.08	7.67	9.02	8.90	9.00	6.52	8.98	9.01	8.98	9.01	9.17	8.98	9.08
	Per cent of total population.	4.99	8.63	4.99	.66	4.04	4.04	2.74	3.86	3.81	3.85	2.17	3.81	3.85	3.86	3.87	3.85	3.86	3.83
Total	....	99.95	100.01	99.53	100.01	99.50	99.50	99.90	100.00	100.00	100.00	99.99	100.00	100.00	100.00	100.00	100.00	100.10	100.00

* Elected.

APPENDIX "B."

Auction Receipts in Various Places.

	Baltimore, Md.	Massachusetts.	Boston.	New York State.	Pennsylvania.	Philadelphia.
1810-21.	.....	.....	.....	$1,628,981.52	.....	.....
1821....	$16,514.99	.....	.....	154,543.92	.....	.....
1822....	18,572.04	.....	.....	180,761.68	.....	.....
1823....	22,054.43	.....	.....	208,254.01	.....	.....
1824....	22,731.03	.....	.....	226,218.13	.....	.....
1825....	25,984.54	.....	.....	285,037.62	$ 94,970.67	$ 72,513.30
1826....	.....	.....	.....	242,810.06	145,308.78*	.....
1827....	.....	.....	.....	247,808.24	163,828.84	.....
1828....	.....	$34,297.65	.....	257,180.40	162,889.59	.....
1829....	.....	37,358.97	$25,859.92	242,552.54	159,518.75	140,578.08
1830....	.....	.....	.....	.....	151,747.19	.....
1831....	.....	.....	.....	.....	138,605.00	.....
1832....	.....	.....	.....	.....	129,537.09	.....
1833....	.....	.....	.....	.....	94,738.08	.....

*Estimated for the year from receipts from one quarter.

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AN INVESTIGATION IN REGARD TO THE CONDITION OF LABOR AND MANUFACTURES IN MASSACHUSETTS, 1860-1870

JONATHAN F. SCOTT.

In making a study of the effects of the Civil War upon economic conditions in any part of the country, it is unsafe to assume, for purposes of comparison, that the year 1860 was a year of prosperity, and that a healthy state of affairs during the next five years is proved by gains over conditions existing in that year. In order to prove progress by means of comparisons between 1860 and later years, it must be shown that in 1860, the recovery from the Crisis of 1857 was complete. If, for example, we find an industry in poorer condition in 1865 than it was in 1855, we may assume one or more of the following causes: 1. that the effects of the crisis have been felt by this industry for eight years. 2. that the industry has been depressed by the economic disturbances accompanying the war. 3. that special circumstances have caused its decline. The question is not only whether conditions in 1865 were better than they were in 1860 or 1861, but whether there has been a normal advance since 1857.

There is no doubt that by 1860, Massachusetts was at least beginning to recover from the crisis. The governor, in his address, Jan. 6, 1860, said "the mechanical, manufacturing, and commercial interests are recovering from recent depression and will soon exhibit, with such aid as the general government may properly grant, their former vigor and success."[1] The number of firms and corporations established in 1860, and reported to

[1] Reported in the Boston Daily Advertiser, Jan. 7, 1860.

be in existence in 1890, was 396, as over against 160 in 1859 and 174 in 1858.[2] The amount of deposits in savings-banks was considerably larger than in previous years and the number of depositors had increased.[3] The average number of paupers supported at the three state almshouses was less than it had been for some time.[4] The Boston Board of Trade reports the various articles of produce as showing, with a few exceptions, a fair increase over previous years.[5] On the whole, the clouds seemed to be breaking, and there were prospects of fair weather in the business world.

I am inclined to think, however, that Massachusetts was recovering more slowly from business depression than the country as a whole. The wool industry seems to have been less flourishing in 1860 than in 1859,[6] while the boot and shoe trade was in a state of unusual depression.[7] In the country at large, on the other hand, E. D. Fite says, "the crops were abundant, and manufacturing, with few exceptions, was active in every branch. . . . All branches of commercial life were reasonably prosperous, looking forward to the future with confident hopes of growth and expansion, and relying on peace to bless their ventures."[8] The Boston Daily Advertiser indignantly resents the statement of Mr. Douglas that " 'the mechanics and laborers of New England are now reduced to the starvation point,' " but it goes on to say "prices are so low that some classes of manufacturers cannot pay to their workmen wages sufficient for their support.[9] Certainly these statements do not indicate the existence of prosperity in Massachusetts at the beginning of the decade. Furthermore, figures taken from the Report of the Boston Board of Trade for 1861, show that the value of exports, from the District of Boston and Charlestown,

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2 Wadlin, The Growth of Manufactures, p. 308

3 Mass. Public Documents. Abstracts of Returns from Savings Institutions, 1857–1860.

4 Mass. Pub. Doc. Report of the Board of State Charities, 1864.

5 Report of the Boston Board of Trade, 1861; Review of the Market for 1860.

6 Ibid.

7 Ibid; also Boston Daily Advertiser, March 5, 1860.

8 Fite, Prosperity during the Civil War, p. 2.

9 March 5, 1860.

fell from $28,326,918 in 1857 to $15,168,015 in 1860, a decrease of nearly 47 per cent. During the same period the value of exports from the United States as a whole rose from $362,960,682 to $400,122,296, an increase of over 9 per cent. Imports into Boston decreased about 12 per cent. Imports into the country at large decreased a little less than 3 per cent. These bits of evidence tend to show that Massachusetts was still in the shadow of the panic and that she was not as well off as the country at large, in 1860.

Among the causes of economic disturbance during the war period were the enlistment of great numbers of laboring-men, the stoppage of trade between North and South, the constant fear of military disaster, and the issue of paper money. Of these, the last was the most potent in bringing trouble. The enormous expenses of the war necessitated the issue of paper currency, a measure which was, in reality, the exaction of a forced loan. Owing to lack of confidence in the government the greenbacks depreciated in value, or—to put it the other way around—gold was at a premium. Dewey gives a table showing the average annual value in gold of $100.00 in currency, from 1863 to 1878.[10] Not until December 17, 1878, was paper currency quoted at par.[11]

1863	$72.9	1871	$88.7
1864	64.9	1872	89.4
1865	49.5	1873	87.3
1866	71.2	1874	89.3
1867	70.9	1875	88.4
1868	71.5	1876	87.8
1869	72.7	1877	92.7
1870	81.1	1878	97.5

The results of the depreciation of the paper currency were far reaching, but it is here important to us chiefly on account of its effects upon wages and prices. The comfort of the laboring-man depends largely upon these two factors. If prices are high and wages are low he is likely to suffer. If, on the other hand, wages are high, and the purchasing power of money is considerable, it is probable that he is in fairly comfortable circum-

[10] Financial History of the United States, p. 376.
[11] Financial History of the United States, p. 375.

stances, unless, of course, he is not steadily employed. The depreciation of paper money caused a rise in the nominal value of wages and prices. They were both raised, but not proportionately. The following figures from the Aldrich Report[12] will bring this out.

WAGES (IN THE UNITED STATES)			PRICES (IN THE UNITED STATES)		
Year.	Simple average.	Average according to importance.	Year.	All articles simply averaged.	Average according to importance.
1860.....	100.0	100.0	1860.....	100.0	100.0
1865.....	143.1	148.6	1865.....	216.8	190.7
1868.....	159.2	164.9	1868.....	160.5	150.7
1869.....	162.0	167.4	1869.....	153.5	135.9

In 1862 prices began to soar above wages. By 1865 the former were more than twice what they had been in 1860, while the increase in wages was between forty and fifty per cent for the same five years. In other words, the increase in prices was more than double the increase in wages. This was not entirely due to the inflation of the currency, but it may be attributed largely to that cause. From 1865 to 1873 wages gradually increased while prices went down. By 1869 the percentage for wages was higher than the percentage for prices. The figures in the Aldrich Report are said to be somewhat untrustworthy, but they seem to show that the condition of the workingman, while not an enviable one during the war period, improved during the latter half of the decade, so that by 1869 he was better off than he had been in 1860.[13]

Statistics for Massachusetts show the increased cost of living in that state during the war. From the table given here we see that income has not kept pace with expenses.[14]

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[12] Pages 9, 13.

[13] Prof. Mitchell in his book "Gold, Prices, and Wages under the Greenback Standard," says, "The wage-changes from 1867 on . . cannot be explained as a defence of the standard of living prevailing in 1860. In other words, the advance in money wages from 1867 to 1872, represents a real improvement in the position of wage-earners—very slow from 1867 to 1869, faster in the next two years." P. 245.

[14] Report Mass. Bureau of Statistics, 1873, p. 522.

Income compared with cost of living.

Year.	Trade.	Annual income.	Estimated cost of living, family of four.
1860	Blacksmith	$697 50	$587 17
1860	Laborer	325 00	587 17
1863	Blacksmith	852 50	711 50
1863	Laborer	455 00	711 50
1864	Blacksmith	852 50	808 27
1864	Laborer	455 00	808 27

The Daily Evening Voice, a labor paper published in Boston, asserts in 1864, that never "in the history of this country was there such a gripe upon the laborer as at the present time. He is taxed for all the luxuries of the wealthy, which he is too poor to enjoy."[15] Allowing for partisan exaggeration in this latter statement, it is yet clear that the workingman in Massachusetts was having a hard struggle for his livelihood during the Rebellion. It is probable, however, that if willing to work he found little trouble in securing and retaining employment from 1862 to the end of the war.[16]

After the war there was an increased demand for labor in the state, owing to a general revival of manufactures.[17] Employment continued to be steady during the latter half of the decade.[18] The number of hands employed in manufactures increased more than 28 per cent during the ten years, while the population increased only 18 per cent;[19] 39 per cent of the population are returned as being engaged in gainful occupations in 1870, as over against 37 per cent in 1860.[20] On the other hand, the relation between wages and prices was slow of readjustment. The Commissioners on the Hours of Labor conclude that the average advance of wages in 1867 over 1860 has been

[15] Daily Evening Voice, Dec. 13, 1864.

[16] "In nearly all departments of trade there was a scarcity of labor, and all who were willing to work found employment at good prices." Report, Boston Board of Trade, 1867, p. 42.

[17] Voice, July 26, 1865, quoting from the Newburyport Herald; Ibid, Aug. 21, 1865, quoting from The Traveller; Ibid, Sept. 22, 1865, quoting from the Lynn Bulletin, etc.

[18] Reports Boston Board of Trade, 1866–1871. Passim.

[19] From figures given in United States Census Reports, 1860, 1870.

[20] Ibid.

about 50 per cent, whereas prices have risen over 100 per cent.[21] The following tables, constructed from the Report of the Massachusetts Bureau of Statistics of Labor for 1879 [22] compare wages and prices in 1860 with wages and prices in 1872, the values being reduced to a gold basis.

Occupations.	Average weekly wage standard gold.		Articles.	Average retail prices standard gold.		Approximate increase.
	1860	1872		1860	1872	
Agricultural laborers, per week, with board..	$3 41[23]	$5 77[23]	Flour, wheat, superfine, bbl.....	$7 61	$10 75	41%
Cutters of boots and shoes.....	12 00	14 81	Flour, wheat, family, bbl.....	7 14	12 75	78
Cutters of Clothing	13 92	19 85	Sugar, good, brown, lb.	0 08½	0 10½	24
Cotton dyers.....	5 87	8 93	Beef, corned, lb.....	0 06½	0 10½	61
Cotton goods mechanics..	8 35	12 96	Butter, lb.....	0 21½	0 39½	80
Woolen goods, dyers.....	5 72	7 95	Cheese, lb.....	0 13½	0 17½	32
Woolen goods, carders...	5 32	7 30	Potatoes, bu.....	0 59	1 02	73
Woolen goods, mechanics	8 90	12 47	Milk, qt.....	0 04½	0 08	68
			Eggs, doz.....	0 20½	0 30	48
			Coal, ton.....	6 40	6 25	45
			Wood, cord, hard.....	6 49	10 12½	56
			Boots, men's heavy....	2 75	3 94	43
			Rent, 4 rooms tenement, week.....	1 11[23]	3 69[23]	139
			Board, week, men.....	2 79	5 62	

From these tables it appears that wages went up about 48 per cent during the twelve years, while fuel went up over 50 per cent, provisions 55 per cent, and board and lodging about 139 per cent. Other evidence [24] supports the conclusion that the workingman of Massachusetts was not as well off in the latter sixties and early seventies as he had been before the war. C. R. Fish, in speaking of economic conditions in Wisconsin after the war, says, "The ease with which Wisconsin adjusted itself to these two successive labor difficulties (of which he has given an account) suggests interesting questions as to the relative elastic-

21 Report of the Commissioners on the Hours of Labor, Boston, 1867, pp. 16, 17.

22 Pages 67 ff.

23 Approximately.

24 Table giving expenses of a house-carpenter of Salem, Mass., given in Report Mass. Bureau of Statistics of Labor, 1872, p. 522; Report Boston Board of Trade, 1868, p. 121, says "The merchant, the manufacturer, and the mechanic, who, in taking a retrospective glance at his business during the past twelve months, finds a balance in his favor, may consider himself fortunate, for his case is the exception and not the rule." See also Boston Daly Advertiser, Jan. 13, 1870.

ity of agricultural as compared with manufacturing communities." [25] The evidence which has been presented here seems to indicate a slower recovery in manufacturing communities, for Massachusetts is preeminently a manufacturing state.

The fluctuations of wages and prices and the discontent arising therefrom had many results. For one thing, there were attempts on the part of workingmen to combine. During and after the war we find trades-unions, as well as other kinds of associations of workingmen, multiplying and increasing in strength.[26] Although these forms of resistance often failed, they are at least a partial cause of the improvement of the relations between labor and capital which came about in the seventies. During the sixties we also find a considerable agitation for shorter hours of labor. The Voice frequently complains of the injustice of compelling employees, particularly women, to work eleven or more hours a day in a factory. Eight Hour Leagues were formed in Boston,[27] and a commission was appointed by the legislature of Massachusetts to inquire into the question of the hours of labor. The commissioners, in their report of January, 1867, make the following statement: "Answers to the . . . inquiry were received from seventy-four establishments, which give the following as the hours of labor:—

5 worked 10¾ hours.
63 worked 11 hours.
4 worked 12 hours.
12 worked irregular hours, 8 to 15.

From this it will be seen that eleven hours is the rule, and any longer or shorter time the exception in the factories of the Commonwealth." [28] Much of this agitation centred around, and was chiefly caused by, the employment of women and children in the factories. The withdrawal of large numbers of men for the army frequently left the burden of supporting their families

[25] Some Phases of the Economic History of Wisconsin, 1860–1870. Proc. Wis. Hist. Society for 1907, p. 211.
[26] Voice, Dec. 28, 1864; Jan. 5, 1865; also 1865, 1866 passim; Rept. Boston Board of Trade 1870, p. 127.
[27] Voice, Sept. 10, 1865, and passim; Report of the President of the Boston Eight Hour League, 1872.
[28] P. 8.

upon their wives and children, who were sometimes forced, especially in the last two years of the war, to seek employment in the factories. The commissioners to whom we have just referred, say "We have been satisfied from our personal observation, as well as the testimony of those best qualified to judge, that eleven hours' toil each day for six days in each week is more than women and children ought to be required to perform. We are certain that they cannot do this without impairing, sooner or later, their vital powers, and shortening the duration of life. We are confident that it is a most uneconomical waste of life, which it is the interest of the state to prevent." [28a] The commissioners find that 60 per cent of the employees in 65 factories were women.[28b] The appointment of this commission shows that the state was beginning to be aroused to the necessity for action. Not until 1874, however, did the agitation bear fruit in legislation. In that year the ten-hour law was passed, limiting the labor of women, and of children under eighteen years of age, to ten hours a day.[29] The law was practically not in operation until 1879.[30]

The disproportion of women to men in Massachusetts somewhat affected economic conditions. In 1860 there were 592,253 white males in Massachusetts and 629,212 white females. In 1865 there were 597,222 white males and 659,642 white females.[31] The excess of females over males amounted to 36,959 in 1860, while in 1865 it was 62,420. It had increased 41 per cent during the war. Governor Andrew notes some of the effects of the disproportion. "It disorders the market for labor; it reduces women and men to an unnatural competition for employments fitted for men alone, tends to increase the number of both men unable to maintain families, and of women who must maintain themselves unaided.'" [32] The competition between the sexes for employment tended to lower men's wages. Women could sometimes do the same work as men, especially in the

28a. Ibid.
28b. Ibid.
29 Whittlesey, Massachusetts Labor Legislation, etc., p. 12.
30 Ibid, p. 13.
31 Mass. Census Reports, 1860, 1865.
32 Governor's Address to the Legislature of Mass., Jan. 6, 1865.

factories, and were willing to accept less pay.[33] The excess of female over male labor may have had something to do with the comparatively slow readjustment of wages after the war. On the other hand, it had an indirect, but beneficial effect, in that it was a partial cause of the agitation for shorter hours. After the war the disproportion between male and female employees decreased, and by 1870 it was slightly less than it had been in 1860.[34]

In 1865, there came, as has been stated, an increased demand for labor. Confidence was now restored, and it seemed that with the encouragement of the war tariff, the use of new labor-saving machinery, and constantly increasing facilities for transportation, manufactures must flourish. The demand for labor was met by two classes of men. In the first place, there were the returned soldiers. Many of these very naturally stepped into the unfilled places in the mills and factories. Secondly, there were immigrants from Europe and British America to meet the demand for unskilled labor. Immigration into Massachusetts had fallen off enormously between 1855 and 1865. In 1850 there were 164,024 foreign born persons in the state; in 1855 there were 244,685, an increase of 80,661 persons.[35] In 1865, however, there were only 265,486 foreigners in Massachusetts,[36] an increase of but 20,801 over 1855. In other words, the number of immigrants during the ten-year period 1855 to 1865 was less than a third of what it had been during the five-year period 1850 to 1855. In 1870, however, we find 353,319 foreign-born persons in Massachusetts,[37] an increase of 87,833 in the five years following the war. A large proportion of these people went into the factories. Miss Turvill, in her thesis "Immigration into Massachusetts, 1820–1900," says "About two-thirds of the Canadians who were employed were found in manufacturing industries. In this respect, the French-

[33] The Voice, July 25, 1865, gives the average daily wages of a woman at 87½ cents.

[34] U. S. Census Reports, 1860 and 1870, give the number of hands employed: Male, 1860, 146,268; 1870, 179,032; Female, 1860, 71,153; 1870, 86,229.

[35] U. S. Census Report, 1870, Mass. Census Report, 1855.

[36] Mass. Census Report, 1865.

[37] U. S. Census Report, 1870.

Canadians ranged second among the foreign nationalities."[38] The Irish were first.[39]

It is usually stated that the Civil War acted as a stimulus to manufactures. Carroll D. Wright, in his "Industrial Evolution of the United States" says, "The North held the mechanical industries of the country, and naturally under the stimulus of war, these industries could be expanded to almost any extent, and they were so expanded, giving to the North every resource of power which mechanics give to great armies."[40] A recent careful investigation, while taking a somewhat more moderate view, concludes that manufactures in the North recovered speedily from the depression of 1861 and flourished during the remainder of the Rebellion.[41] It is not our purpose here to determine whether these conditions hold good for the whole North, but whether they apply to Massachusetts.

Indications of prosperity in Massachusetts during the war period are to be found in the reports of the Boston Board of Trade. The Board admits a falling off in many branches of business in 1861, but says "the disasters so confidently predicted, have not been realized to their full extent. What a year of prosperity the past would have been if it were not for the present civil war." [42] In reviewing the market for the year 1862, the Report of the Board says, "The industry of Massachusetts, paralyzed for a short time at the commencement of the struggle, soon recovered from the depression . . . the result of the war so far has been to impart increased activity to many of our leading branches of manufacture, and, all things considered, the productive industry of the state was never more fully developed or more prosperous than at the present time." [43] The Reports of the Board for the two following years give us the same idea of the general prosperity of manufactures.[44] All this evidence must not be underestimated, for it is, in the main,

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[38] Turvill, p. 67.
[39] Ibid, p. 92.
[40] Wright, Industrial Evolution of the United States, p. 153.
[41] Fite, Prosperity During the War; A Study of Northern Conditions, p. 63.
[42] Report Boston Board of Trade, 1862, p. 63.
[43] Report Boston Board of Trade, 1863, p. 43.
[44] Ibid, 1864, p. 59; 1865, p. 63.

the result of a careful study of statistics. It is possible, however, that the Board was deceived by the high prices which prevailed, and which were chiefly due to the premium on gold, into thinking that industry was in a flourishing condition. In fact, the Report for 1867 admits that "From 1862 to 1866 was a period of seeming prosperity."[45]

There is no doubt that certain individual manufacturers made enormous fortunes during war times. There is no doubt, also, that certain industries in Massachusetts were stimulated by the change in conditions. Of these the most important was the manufacture of wool. Even before the war there were signs that this industry was to have a rapid growth. Governor Andrew, in his address to the legislature, Jan. 5, 1861, said, "Attention to sheep husbandry is now on the increase, by reason of the protection which has been afforded to it by judicious legislation, and the importance of this branch of farming to the various interests of New England can hardly be over-estimated." [46] Later, when the war came, the high price of cotton increased the demand for woolen goods. Cotton factories in the neighborhood of Boston became woolen factories.[47] Between 1855 and 1865 the number of establishments for the manufacture of wool increased from 146 to 218, while the number of pounds of wool consumed grew from about 19,000,000 to nearly 29,000,000.[48] After the war the business became less profitable. The Boston Board of Trade reports in 1869 "scarcely a woollen mill in New England . . . has done a profitable business, and most of them will be satisfied, if, on balancing the profit and loss of the year, there is no actual loss." [49] In 1870 the industry had not improved.[50] In fact the following table giving the number of bales received in Boston annually from 1860 to 1870 shows a falling off in 1870 from 1869.[51]

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[45] P. 42.

[46] Address to the Legislature, Jan. 5, 1861; see also Boston Daily Advertiser, May 1, 1860.

[47] Fite, p. 12.

[48] De Witt, Statistical Information Relating to Certain Branches of Industry in Massachusetts, etc., for 1855; and Warner, Ibid, for 1865.

[49] Report Boston Board of Trade, 1870, p. 128.

[50] Ibid, 1871, p. 138.

[51] From Reports Boston Board of Trade, 1860–1870.

Wool, bales, receipts.

1860.	48,974	1866	177,346
1861.	65,900	1867	196,431
1862.	90,603	1868	236,970
1863.	112,631	1869	216,320
1864.	157,262	1870	185,015
1865.	180,750		

These figures, however, give an idea of the gain of the wool industry during the decade. Though profits were probably small for some time after the war, the trade was too firmly established to be permanently injured. It is probably fortunate for the economic progress of the state that the wool industry in large measure took the place of the manufacture of cotton, since the soil of New England is by nature adapted to the raising of sheep, whereas cotton has to be transported from a great distance.

The industry which had been the most important in the state before the war was the one to suffer most between 1861 and 1865. The cutting-off of the supply of raw material from the South was, of course, the chief cause for the decline in cotton manufacture. The number of bales received in Boston in 1860 was 381,966. In 1864 it was 77,890,[52] a decrease of nearly 400 per cent. But little over half as many yards of cloth were manufactured in 1865 as in 1855.[53] The Southern market speedily revived after the war, however. The newspapers tell us in July 1865, "There is not a spindle or loom in the country that would not be put in motion if skilled labor could be had for that purpose."[54] In 1869, however, many manufacturers had to stop their mills on account of the depressed state of the trade,[55] and in 1870, though business was more satisfactory than it had been the year before, profits were not large,[56] while the number of bales received in Boston was not nearly as large

[52] Reports Boston Board of Trade, 1860–1870.

[53] De Witt, Statistical Information, etc., 1855; Warner, Ibid, 1865.

[54] Voice, July 26, 1865, quoting from the Newburyport Herald; see also Voice, Oct. 1, Oct. 6, Nov. 25, 1865, for other notices relative to the revival of this branch of manufacture.

[55] Report Boston Board of Trade, 1870, p. 127.

[56] Ibid, 1871, p. 139.

as it had been in 1860.[57] In fact the progress of cotton manufacture in the state had been permanently retarded by reason of the growth of the wool industry and by the fact that the South had been thrown on its own resources during the war period, and was learning to manufacture its own cotton.

A third industry ranking in importance with cotton and wool was the manufacture of boots and shoes. Here we note a decline between 1855 and 1865. The annual output of the factories dropped from about 45,000,000 pairs to about 31,000,000 pairs during the ten years,[58] while the number of manufacturers decreased during the war period from 1,885 to 1,269.[59] In 1859, 750,000 cases of boots and shoes were shipped from Boston; in 1865, 715,844, while the figures for intervening years are much smaller.[60] Immediately after the war there came a rapid reaction. "The shoe business was never more promising than at this time," says the Daily Evening Voice, August 21, 1865, and again, "The shoe business of Lynn was greater than it has ever been before for a corresponding length of time."[61] The following figures, giving the number of cases forwarded annually from Boston indicate the progress of the industry from 1866 to 1870.[62]

1866	852,622
1867	938,379
1868	1,041,472
1869	1,182,704
1870	1,213,129

The number of establishments increased during these five years, and while the number of hands employed was slightly less in 1870 than it had been in 1860,[63] this may probably be accounted for by the introduction of labor-saving machinery such as the McKay sewing machine, for sewing uppers to soles. This was patented in 1858 and put on the market in 1862. This inven-

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57 Ibid, Reports 1860–1871. 381,966 bales received in 1860. 265,026 bales received in 1870.

58 DeWitt, Statistical Information, etc., 1855; Warner, Ibid, 1865.

59 Mass. Census Reports, 1860, 1865.

60 Reports Boston Board of Trade, 1860–1866.

61 Oct. 22, 1865.

62 Reports Boston Board of Trade, 1871.

63 U. S. Census Reports, 1860, 1870, give 62,283 hands employed in 1860. 54,831 hands employed in 1870.

tion was instrumental in bringing the boot and shoe industry from the small shops to the factories.[64] The Boston Board of Trade reports the industry as being in a very flourishing condition in 1870.[65] It is clear, that this branch of manufacture, though temporarily retarded during the war, was not seriously checked, but made rapid strides after peace had been proclaimed. Today Massachusetts is preeminently the shoe-manufacturing state of the Union.

The fifteen years from 1855 to 1870 saw a great advance in the manufacture of sewing-machines. The number of machines manufactured in Massachusetts increased from about 4,000 in 1855 to nearly 50,000 in 1865.[66] The number of hands employed in this business was 514 in 1860, 1033 in 1870.[67] Indirectly the extensive use of the sewing-machine somewhat affected the labor market. Women who had other sources of income sometimes took needlework at very low prices in order to afford themselves luxuries or to contribute to the family support. This reacted on the labor of other women, forcing them to accept low wages.[68] The Voice in 1864 estimates the average wages of sewing-women at $3.00 to $3.50 per week,[69] a low rate at any time, but a most miserable pittance in a period of inflated currency. The value of the sewing-machine to the household, however, more than offset any disturbances which it may have brought to the labor-market.

No study of economic conditions in Massachusetts at this time would be complete without some account of the decay of the merchant marine. In the first half of the nineteenth century very many of the coast and river towns of Massachusetts were important ship-building places. Boston was, of course, the most conspicuous of these,[70] but Salem, Newburyport, Ames-

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[64] Fite, pp. 68, 69.
[65] Report, 1871, p. 139.
[66] DeWitt, Statistical Information, etc., 1855; Warner, Ibid, 1865.
[67] U. S. Census Reports, 1860, 1870.
[68] Voice, Apr. 7, 1865.
[69] Ibid, Dec. 13, 1864.
[70] U. S. Census Report, 1880, vol. VIII, The Ship Building Industry in U. S., p. 110. "For a long period Boston was the first of American cities in the amount of tonnage owned by her merchants, and she has always ranked as one of the first four."

bury, and Haverhill also had large industries. In 1880 the situation had entirely changed. "At present, except at Newburyport, ship-building has been completely abandoned on the Merrimac, and that town in the census year (1880) presented a desolate array of abandoned ship yards, boat-shops, and rope-walks." [71] In 1860, wages for ship-building had reached their highest point, $20.84 a week; in 1878 they had gone down to $10.75.[72] In 1860 the total tonnage of American vessels amounted to over 12,000,000 tons. In 1870 it had declined to less than 7,000,000.[73] In 1860, 70 per cent of the carrying trade between Great Britain and the United States was in the hands of American ship-owners; in 1870 only 24 per cent.[74]

Not all of this decline is to be attributed to the Civil War. It is probable that the industry would have decayed even had there been no war. The change from wood to iron hulls was an advantage to Great Britain, for at the time of this change she produced much more iron than the United States. The change from paddle to screw also tended to throw the business of ship-building into England's hands. The abandonment of subsidies for the Collins Line and others in 1857, is thought to have been another cause of decay.[75] Reciprocity treaties with Great Britain, in which she took advantage of us,[76] the transition from sail to steam,[77] the diversion of business enterprise and capital to other more profitable pursuits,[78] the increased cost of materials and labor,[79] the navigation laws and other national and state restrictions,[80] have all been considered partial causes of decline. The decay was consummated, however, during the Civil War. At that time Confederate vessels preyed on our commerce, so that a large number of American ships transferred to foreign flags for protection. After the war they were pre-

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[71] Ibid, p. 108.
[72] Wright, Wages and Prices, pp. 28 ff.
[73] Report Merchant Marine Commission, vol. 3. pp. 1768, 1769.
[74] Ibid.
[75] Report Merchant Marine Commission, vol. 1, p. 630; vol. 3, p. 1680.
[76] Ibid, vol. 1, p. 630, Statement of J. C. Ross.
[77] Ibid, vol. 3, p. 1679, Statement of Hon. R. G. Bickford.
[78] Ibid, vol. 1, p. 381, Statement of P. D. Todd.
[79] Ibid, vol. 3, p. 1749, Statement of Rear-Admiral P. F. Harrington, U. S. Navy.
[80] Ibid.

vented by our navigation laws from becoming American vessels again.[81] Ship-builders now found their business unprofitable, and while many of them struggled on for some time, others turned their attention to more profitable fields of enterprise. From the blow delivered by the Civil War, our shipping industry has never recovered.

Having traced the course of some of the more important industries in Massachusetts during and after the war, let us examine the following table which compares conditions of certain branches of manufacture in 1865 with conditions in 1855.[82]

		1855.	1865.
Cotton	Number of establishments	294	214
	Yards of cloth manufactured	314,998,567½	167,665,369
Wool	Number of establishments	146	218
	Lbs. of wool manufactured	18,786,298	28,790,078
	Yards of broadcloth manufactured	759,627½	3,457,702
Sewing machines	Number of establishments	8	9
	Sewing machines manufactured	4,028	48,563
Calico	Number of yards printed	61,040,000	53,489,434
Bleaching and coloring	Number of establishments	11	5
	Number of hands employed	644	447
Boots and shoes	Pairs of boots manufactured	11,892,329	7,249,921
	Pairs of shoes manufactured	33,174,409	24,620,660

The manufacture of
carpets, declined between 1855 and 1865.
hosiery, improves between 1855 and 1865.
linen, improves between 1855 and 1865.
silk, nearly stationary between 1855 and 1865.
nails, declines between 1855 and 1865.
pig iron, declines between 1855 and 1865.
hollow ware and castings, improves between 1855 and 1865.
scythes, declines between 1855 and 1865.
cutlery, improves between 1855 and 1865.
ploughs and other agricultural implements, declines considerably between 1855 and 1865.

From this table and the other evidence thus far presented it is clear that many industries, and especially the more important ones,[83] were not only retarded in their natural rate of progress during these ten years but were not as well off in 1865 as they had been ten years before.

During the twenty years preceding the Crisis of 1857, the

81 Ibid, vol. 1, p. 435.
82 Constructed from DeWitt, Statistical Information, etc., for 1855, and Warner, Ibid, for 1865.
83 Wool excepted.

industrial progress of Massachusetts was enormous. In 1838 the annual amount of industrial products was eighty-six million dollars; in 1845 it was one hundred twenty-four millions, and in 1855 two hundred ninety-five millions.[84] Between 1845 and 1855 the increase in value was 138 per cent. Between 1855 and 1865, however, it was only 72 per cent, according to Oliver Warner,[85] who has collected the statistics on the subject. Furthermore, if the inflated condition of the currency in 1865 be taken into account, it is clear that the real increase was much less than 72 per cent. In fact, if we accept Dewey's calculation that a paper dollar in 1865 was, on the average, worth less than fifty cents,[86] the supposed increase in the value of manufactured products becomes a decrease.

Other evidence supports the conclusion that the progress of manufactures slackened during the war period. According to Warner, there were 271,421 hands employed in various kinds of manufacture in 1855. In 1865, there were 245,908, a falling-off of over 25,000.[87] This alone would not prove a depression of manufactures, for it may be partially, perhaps wholly, accounted for by the introduction of new labor-saving machinery How many men this new machinery threw out of employment we have no means of knowing. Glance, however, at the following table, which gives a comparison between the number of males over fifteen years of age engaged in certain occupations in 1860, and those engaged in the same occupations in 1865.[88]

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[84] Warner, Statistical Information, etc., for 1865, pp. xxi and xxii.
[85] Ibid.
[86] Financial Hist. U. S. p. 376; see table given above, p. 3.
[87] Warner, p. 793.
[88] Constructed from Mass. Census Reports 1860, 1865. Note also that between 1855 and 1865 the number of manufacturers in Mass. decreased from 5,294 to 3,903. Mass. Census Rept. 1865, p. 306.

	1860	1865
Carpenters	15,635	13,966
Caulkers and Gravers	588	525
Farmers	46,198	56,992
Farm laborers	18,371[89]	1,053[89]
Manufacturers:		
Boot and shoe	1,885	1,269
Cotton and wool	212	171
Paper	117	49
Mariners	16,159	14,778
Mechanics	3,213	5,890
Millwrights	263	210
Operatives in Mills	16,145	12,005
Painters	6,005	4,828

The foregoing table shows a falling-off in the number of manufacturers and in the number of mill operatives, and combines with the other evidence presented, to prove that, in general, manufactures declined in Massachusetts between 1855 and 1865. Much of this decline came during the war period, and in spite of the encouragements of the war tariff. It was probably due to the after-effects of the Crisis of 1857, and to the economic disturbances accompanying the war.

After the cessation of hostilities, manufactures seemed to take on new life. Fear of disaster had passed away, confidence was restored and the opening of the Southern market afforded new opportunities for trade.[90] The transition from war to peace seems not to have been very disastrous.[91] By 1870 it is probable that manufactures were in fairly good condition. The number of establishments had increased from about 8,000 to over 13,000 (8,176 to 13,212) during the decade, the number of hands employed from 217,421 to 279,380,[92] an increase of over 28 per cent. As the population had increased only about 18 per cent during the same period,[93] it is evident that the factories were employing a considerably greater portion of the state's inhabitants in 1870 than in 1860. The total value of manufactured products rose from $255,545,922 to $553,912,568 dur-

[89] This apparently great decline is probably due to a change in the method of making returns. Perhaps many of those given as "farm laborers" in 1860 were returned as "farmers" in 1865.

[90] Report Boston Board of Trade, 1866, p. 72.

[91] Ibid, p. 72.

[92] U. S. Census, Reports, 1860, 1870.

[93] From 1,231,066 in 1860 to 1,457,351 in 1870. U. S. Census Reports.

ing the ten years.[94] According to the United States Census for 1870, goods worth $1,000,000,000 in 1860 would have been worth $1,560,000,000 in 1870. In other words, "the Superintendent is disposed to regard 56 per cent as a just statement of the increase in price for all classes of mechanical and manufacturing productions between 1860 and 1870."[95] If the total value of manufactured products in 1860, $255,545,922 be multiplied by 1.56 the result will be slightly less than $400,000,000, which, subtracted from the valuation in 1870, gives an absolute increase of over a hundred and fifty million dollars during the decade. Business conditions were still unsettled, however, and it is probable that the profits of manufacturers were small. The total cost of raw materials rose (in currency values) over 147 per cent[96] during the decade, while the total annual value of products rose only 117 per cent. The Report of the Boston Board of Trade for 1867 says that business men, with few exceptions, found their profits in 1866 less than they had found them for some years.[97] The next year they speak of "extreme depression in all branches of business."[98] There is the same sort of complaint for 1869. "The manufacturer has found it difficult to obtain cost for his goods. . . . We must, however, look for these fluctuations until all business transactions are conducted on a specie basis."[99] In 1870 conditions appear to have improved slightly, but, "small profits and strict economy in the sale and manufacture of goods is now the order of the day."[100] Evidently prosperity had not been entirely reestablished at the end of the decade which we have been considering.

In general it seems safe to conclude that the thirteen years from 1857 to 1870 were a period of more or less economic depression in Massachusetts. The lowest point was touched in 1861 when the outlook was as black as it has ever been at any time in the history of the United States. Conditions in 1865

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[94] U. S. Census Reports, 1860, 1870.
[95] U. S. Census Report 1870, vol. on Industry and Wealth, p. 379.
[96] From figures in U. S. Census Reports, 1860, 1870. $135,053,721 in 1860. $334,413,982 in 1870.
[97] P. 42.
[98] Report for 1868, p. 121. Review of the Market for 1867.
[99] Report 1870, p. 127.
[100] Report 1871, p. 138.

were undoubtedly better than they had been in 1861, but probably not as good as they had been in 1855. The restoration of confidence after the war brought a speedy revival of manufactures and a new demand for labor, but there was no great prosperity. The number of manufacturing establishments increased, and employment seems to have been steady, but wages were low during the five years after the war, and even with the encouragement given by the war-tariff, and the increased use of labor-saving machinery, profits were small. Massachusetts seems to have been slow in recovering from the financial crisis of 1857 and the political crisis of the sixties. Had she been an agricultural state it is probable that readjustment would, in both cases, have been more rapid.

EARLY HARBOR HISTORY OF WISCONSIN.

R. G. Plumb.

The State of Wisconsin contains many of the most important harbors of the Great Lakes. Within its boundaries at sixteen different points the United States government has undertaken improvement and there are, besides, numerous bays and coves, where improvements of a purely local nature have been made by individuals. The sixteen government harbors are at Kenosha, Racine, Milwaukee, Port Washington, Sheboygan, Manitowoc, Two Rivers, Kewaunee, Algoma, Sturgeon Bay, Green Bay, Pensaukee, Oconto, Marinette, Ashland and Superior. There is also the harbor at Bayfield, that enjoys the distinction of being one of the few where engineering skill was not required to aid nature and where artificial improvement, beyond a few private docks, was totally unnecessary, since deep water extended up to the very docks.

The participation of the national government in the construction of harbor improvements is a matter of historical development. As such it is but a subsidiary phase of the general history of internal improvements, and is marked by the gradual augmentation of national power, due partly to legislative action and partly to judicial construction. It was a fundamental English doctrine that rivers and bays were the king's property and this theory the American Colonies adopted, going so far as to claim the right to lease streams and inlets. By the Articles of Confederation Congress was given no power over navigation so that the control of the separate colonies continued. It was the inequality of the tonnage dues under this system that was one of the chief causes leading to the adoption of the Federal

Constitution, wherein Congress was given the power to control foreign and domestic commerce. The clause conferring this power is the basis of all harbor legislation, although as an incident of this power Congress did not immediately assume the improvement of even the ocean harbors. That there was a substance and a latent force to the clause, however, is shown by the fact that as soon as the Constitution was adopted, the states applied to Congress for permission to levy tonnage duties, acts that they had performed independently hitherto. The proceeds gained by this and other means enabled the states to undertake ill-planned and worse-executed systems of internal improvement. Most of the funds, thus applied, were devoted to roads, canals and rivers, however, harbors receiving little recognition.

Mere state authority could not indeed long meet the requirements of an expanding people. By a series of legal refinements and complicated distinctions the national system insinuated itself into active being. The first national turnpike had been built in 1807, the first national canal in 1812 and finally in 1822 the first appropriation for a harbor passed Congress. Prior to this there had been bills "for the maintenance of lighthouses, beacons, public piers, etc.," the constitutionality of which had never been questioned but they were not harbor appropriations in the true sense of the term. The original accepted doctrine was that the Constitution was "a salt water instrument" giving power for sea coast improvement only. The new northwest, however, soon lifted its voice, demanding harbors on the Great Lakes, and the convenient theory was advanced that these bodies of water were merely "inland seas." There were those in authority, however, that were unable to admit the constitutionality of improving inland harbors for the needs of commerce, but were satisfied if the plans were designated as "refuge harbors."

Wisconsin came into being as a territory just as the west was beginning to realize the need for national assistance in local projects. Harbor improvements and, indeed, lake commerce prior to 1843, the date of the first appropriation for a Wisconsin harbor, were meagre. The first steamer had appeared on the lakes in 1819; the number had increased to eleven by 1833 and

to fifty-two in 1845. The first line from Buffalo to Chicago was established in 1839 and it was about this time that Lake Michigan gained prominence as a highway of commerce. Prior to 1837 the government had spent but $162,601 on Lake Michigan, wholly at Chicago and St. Joseph, Mich., and up to 1853 only one-eighth of the river and harbor appropriations, taken as a whole, had been devoted to the Great Lakes. Wisconsin's growth in the early thirties soon accentuated its needs. The first memorial concerning harbors in the territory was one by certain steamboat owners trading out of Milwaukee, transmitted to Congress by the Territorial Council of Michigan in December, 1834. They speak of the requirements of the port and think a harbor could be built for $15,000. In the territorial days it was, of course, quite natural for the legislatures to appeal for aid to the general government. The first governor of Wisconsin, in his message in 1836, suggested "the propriety of asking Congress for an appropriation sufficient to cover expenses of surveying all the necessary harbors on Lake Michigan and for the construction of lighthouses." Wisconsin's delegates in Congress secured such appropriations and in 1837 several surveys were undertaken. Petitions regarding improvements poured in on Congress all through the thirties and forties, many signed extensively by residents of eastern cities, such as New York, Albany and Erie. In 1840 and again in 1842 efforts were made at the introduction of Wisconsin Harbor Bills but in both cases they were met with too strong opposition and succumbed. Milwaukee however finally, in 1843, secured $30,000 and Racine and Kenosha $12,500 each in 1844. Other small sums were voted during the period preceding the Civil War, but the major portion of the improvement during that time was done by the localities and individuals particularly interested. It was the era of bridge piers, extensions of wharves or docks built out into the lake to a sufficient depth to accommodate the landing of steamers, and of course very inadequate makeshifts, particularly useless in rough weather. Most of these piers were built by individual initiative and often excessive tolls were charged. When the national government began the work of harbor im-

provement in earnest, in 1866, a more adequate engineering solution was worked out. It was realized that the shifting sands interfered with lasting improvement; that parallel piers must be constructed, channels dredged and protection breakwaters established.

The sum total of government appropriations for Wisconsin harbors prior to 1866 was $175,700, Milwaukee having received $84,100, Kenosha $37,500, Racine $26,100, Sheboygan $20,000 and Manitowoc $8,000. Thus fully three-fourths of the number of harbors within the boundaries of the state had not been begun by this date and the insignificance of the sum spent is seen by comparison with the total of expenditures within the state up to 1900, an amount approximating $8,000,000. The representatives of the state in Congress were largely responsible for the securing of this large sum, several of them, notably Philetus Sawyer, having been at the very forefront in defense of harbor improvement. Persistent memorials from the state legislatures, petitions from individuals and the steady co-operation of private enterprise—all have been factors in obtaining government aid.

Aside from government improvements in Wisconsin there have been several other agencies at work. First as to the part played by the state. This has been comparatively unimportant and consists almost entirely of legislative control, such as providing and limiting the methods that the corporate locality might employ in the schemes of improvement. Of itself it has done nothing, outside of the construction of the Sturgeon Bay Canal, by means of proceeds from a land grant, donated for the purpose by the general government. This project, while still in the hands of the contractors as the agents of the state, was purchased by Congress and has since been conducted as a national waterway, free of all tolls.

The next factors in Wisconsin improvement have been the village and the city, always prominent, and particularly so in ante-bellum days. Government aid was at that time slow and uncertain and many Wisconsin towns proceeded to help themselves. In fact the city and village were the chief instruments in improvement and the general government merely assisted.

Today conditions are reversed and the role of assistance falls to the locality. However, even yet the improvement inside the harbor or shore line must fall to the lot of the municipality, and repeated statements to this effect have been made by the government engineers. Each municipality is by statute required to keep a separate harbor fund and the general surveillance of the harbor is assigned to harbor masters. The first instance of the existence of this officer was that in the charter of the village of Manitowoc in 1850 and the second in that of Sheboygan in 1862. Besides the direct methods of harbor work, the cities have done much indirectly, by way of assistance to government work, either in appropriations or otherwise. Often the cities have assisted in dredging the outer harbors and in two cities, Sheboygan and Kenosha, the dredge was furnished the government at cost. Kewaunee and other cities have donated property for the use of the Engineers' Department, while in other instances money has been temporarily loaned to carry on the work, where the national appropriations had been insufficient, the municipality trusting for reimbursement, to succeeding appropriations.

Township and county have also contributed a share in the work of improvement. The former has been active where the harbor was not situated in a locality, already incorporated, as for instance Oconto, Kewaunee and Ahnapee (Algoma). The work done by this unit, however, has not been important and county aid has played a much greater part, particularly in the early days when villages were too small to carry on the improvements alone. The counties of Sheboygan, Manitowoc, and Douglas—all have voted considerable sums at various times for this purpose.

Last of all, individual initiative is to be considered as a factor in Wisconsin harbor improvements. Private subscription has always been an important means of raising money and particularly is this true in the early days of improvement. Assistance was thus rendered in Port Washington, Kenosha, Racine and Algoma and in other cases a partial payment of expenses of a government dredge has been contributed by individuals. It will be remembered that the early bridge-piers, also, were owned and

operated by private firms or corporations, the first being that at Kenosha in 1840. Lumber companies in the northern part of the state still build and maintain this sort of a structure and their piers and channels were the basis of the government improvement at both Marinette and Pensaukee. On Lake Superior the private ore docks are always important factors in harbor facilities and many channels have been dredged at private expense from the deeper waters to these docks. Summarizing, it may be said that in Wisconsin every local division has contributed its share in the development of the harbors, all being aided by the co-operation of the individual.

Illustrative of the working out of these principles it is of interest to study in detail the work of these various factors in Wisconsin's three oldest harbors, Kenosha, Racine and Milwaukee.

Kenosha is situated fifty miles north of Chicago and thirty-three miles south of Milwaukee. The first step to be taken towards a harbor was Delegate Durkee's special pre-emption bill of 1837, which provided that the village lots should be sold by the government at an appraised value, fixed by its officers and that the proceeds, estimated at $30,000 should go to the harbor fund. It seems that the land was still in the hands of the government and this way was devised of providing homes for the settlers and insuring their future. The bill, however, failed to pass Congress. A survey was conducted by the government in 1840, but as there were several points, at which it was possible to locate the piers, dissensions arose and no action followed, although the citizens by subscription raised funds to erect a lighthouse. Petitions and memorials, both for appropriations and land grants continued to be poured in upon Congress and in 1844 $12,500 was authorized to be spent by that body. During the latter forties city taxes and bonds were voted and in 1850 a dredge purchased out of the funds of the municipal treasury. Government engineers during this period frequently appeared before the city council to discuss plans and the two authorities worked in entire harmony. Appropriations by the city up to 1879 reached a total of $75,000, about half of which was in the form of bonds. The government up to 1900 has ex-

pended nearly a half million dollars and the result is a twenty-foot channel and a breakwater.

A more important harbor is to be found at Racine, twenty-three miles south of Milwaukee. A survey was made here by the government in 1837 but all efforts to secure an appropriation failed until 1844, when $12,500 was allotted to it. Four years prior to that, however, since legislative memorials and individual petitions had proved unavailing, the city commenced work on two piers and before 1844 had voted at a harbor meeting $10,000 in taxes and subscriptions and $25,000 in bonds. The county extended aid also and an agent was sent to Washington at a salary of four hundred dollars a year to solicit money. Individuals guaranteed the city loans in one instance, in expectation of national assistance and the act of 1843 permitted city harbor works to be sold to the general government. In fact such a start had the local undertakings obtained that, when the government did begin appropriating money, sarcasm was aimed at it for playing the part of an assistant in connection with "a little village." By 1845 the harbor was so well advanced that vessels could enter it, although the old bridge-piers were still used long afterwards. In 1850 a prominent citizen, Philo White, published a lengthy account of Lake Michigan improvements, in which he particularly recommended Racine for government aid. A board of harbor commissioners, three in number, were appointed six years later but their activity was interrupted by the Civil War. Up to 1879 the locality had spent about $60,000 while the government, which assumed full charge of the work in 1866, has appropriated ten times that sum, recently completing a protection breakwater.

The metropolis of the state, Milwaukee, owes much of its past and present importance to its harbor, whose situation, one hundred miles from the foot of the lake has given it great advantages. As early as 1834 attention was called to its improvement and Captain Berrien made a survey and recommended that the government take action. The same year also witnessed the construction of a pier by the first resident, Solomon Juneau, and the building of the first vessel, while a lighthouse, established in 1838, was the first government improvement. The

original plan of the United States engineers was to build a pier at the mouth of the river, but this conflicted with the views of the citizens and thus interfered with harmonious co-operation on their part. The first government appropriations were expended, according to its plans, at the mouth of the river while the city, on the other hand, in April 1844 voted a loan of $15,000 with which to dig a channel known as "the straight cut," thus avoiding the lower windings of the river. Private subscriptions for the same object were also received but the project was not successfully begun until 1852. By that time the government had been convinced that the scheme of the citizens was the better and so abandoned its own work at the mouth of the river, already proved worthless, and appropriated $15,000 to aid the city's plans. Until the latter was completed private piers were the sole means of landing except for those little crafts that could ascend the river at the old mouth. Since the government aid was intermittent the city decided to complete the work itself and having secured in the charter of 1846 power to raise harbor taxes, whenever the citizens so voted, in all some $100,000 was authorized. The cost of the work done in the succeeding years was greater than this amount and the contractors were obliged to bring suit for the balance. Litigation was prolonged for a decade, coming before the Supreme Court of the state several times, under the title Hasbrouck vs. The City of Milwaukee and was finally adjudicated in favor of the contractor in 1866. Thus the cost of the improvement was almost double what it would have been otherwise, the total sum spent by the city for the harbor being in the neighborhood of half a million dollars, up to 1870. Efforts were repeatedly made to secure reimbursement from the government for this sum but all failed of accomplishment. The government resumed the work in earnest after the Civil War and in 1881 began the construction of the outer harbor of refuge, costing a million in itself. The commercial position of the Cream City is so largely due to its harbor however that the expenditures, on the whole, enormous as they have been, cannot be considered as excessive.