

<i>Progymnasium.</i>					
	II.	I.		II.	I.
Religion	4	"	Bot., Zool., Min.,	2	"
Latin	6	"	Drawing	2	"
German	3	"	Calligraphy	2	"
French	4	"	Gymnastics	3	2
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Geography	2	"		34	—
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ARTICLE VI.

COLLEGE EDUCATION.

Hall's Educational Magazine

By Prof. W. G. T. Shedd, University of Vermont.

THE general and growing interest in the subject of education is one of the most hopeful features of the present age. Throughout the country the popular mind is becoming increasingly awake to the importance of knowledge, and the nation as a body is coming to regard Education as one of the great natural interests. Already is it provided for and protected, as commerce, and manufactures, and agriculture are provided for; and the number is already large who clearly see and feel that it is of more importance and exerts a far greater influence upon the perpetuity of the Republic than any or all of the economical interests united.

There is, however, one characteristic attending this general interest upon the subject of Education which cannot but strike the eye of a thoughtful observer. It is a characteristic which, as history shows, invariably attends the movement of the popular mind in proportion as it becomes more extensive and far-reaching, and one that is deleterious in its influence if it does not find its counterpart and corrective.

We refer to the tendency to *popularize* knowledge in an excessive and injurious degree. By this is not meant the disposition to diffuse knowledge among the greatest number possible, but the disposition to render all knowledge superficial and *in this form* to diffuse it through society. If we mistake not, there are signs of a disposition to destroy the distinction between popular and scientific knowledge, and while en-

gaged in the laudable effort to spread information as widely as possible among all classes, to do it at the expense of that profound and scientific culture which must exist *somewhere*, in *some* portion of the community at least, in order to the perpetuity and vitality of even the common information of society.

There is no surer way of correcting this and kindred errors, than by establishing and diffusing profound and comprehensive views respecting the whole subject and the subject as a whole. It is a defective view of knowledge *as a whole*, an incomplete view of the *system* of education which lies at the bottom of the error in question. It is forgotten that the body of knowledge which is sought to be diffused is an organization with central and superficial parts, and that the complete system of instruction which proposes to impart this knowledge is an *organized system*, of which no better definition can be given than that all its parts are vitally connected and are reciprocally means and ends. Popular knowledge therefore cannot be diffused separated from scientific knowledge, and this latter again requires to pass through the tests of popularization in order that it may be proved to have a real and not imaginary existence, in order that it may be seen to be one with truth and absolute existence, and not the mere figment of the brain.

It will be our object in this article to distinctly mark the difference between scientific and popular knowledge, and to show the necessity and worth of those institutions whose office it is to impart scientific in distinction from popular education.

Knowledge traced to its ultimate is in the form of fundamental truths. These fundamental truths or first principles as applied to particular cases or run out to meet the ordinary wants of mankind lose their scientific and profound appearance, become popular in their character, useful in their results and go to constitute the common every-day knowledge of society. The gold originally in the form of heavy bullion has become, comparatively, light coin and a useful circulating medium.

There is, for example, an amount of information diffused through society which is sufficient for the practical purposes of commerce, manufactures and agriculture, and by virtue of the common intelligence in these departments the ship sails swiftly, the machine works well, and the earth brings forth abundantly. But it is not expected, and under the present arrangements of society perhaps it is not rational to expect, that all who work in these spheres should possess a thorough knowledge of those *principles of natural science* — those first truths of astronomy, and chemistry, and mechanics, and mathematics — which lie under all this action of man and yet this body of principles, the *science* which is

beneath this practice and practical application is essential knowledge sustaining the same relation to all the arts, manufactures, and improvements, all the comforts and elegancies of civilization that the flowers and fruit of the tree sustain to the black root underground. And upon the preservation and further development of these fundamental truths depend the permanence of the present civilization and its progressive improvement.

Again there is in the midst of the people an amount of information with respect to legal and civil affairs sufficient to make them careful of their personal rights and watchful over the acts and intentions of government. No people on the face of the globe are so well informed in all that pertains to judicial and civil matters as the people of the United States. An appeal to reason and law always goes home to the mind of the mass and produces a deep and great movement as it could not if we were an uninformed and barbarous population. Still it will not do to say that this knowledge though adequate for all the wants of common life, is equal in degree and depth to that which is implied in a thorough understanding of the *sciences* of Law and Government. It will not do to say that the great body of us are possessed of such a clear and deep insight into the first principles of legal and political philosophy as characterized the framers of the Constitution of the United States. And we do tacitly (but in a free and man-like way) acknowledge this when, in order to form or revise a code of laws or a constitution, we meet and choose the wisest and most thoughtful of our number to do this important work — a work which requires a more than ordinary and popular acquaintance with law and legislation.

Again in this Christian land there is an amount of knowledge concerning God and the eternal world, the soul of man and its obligations which is enough to bring in every man guilty before his Judge, and enough if rightly improved to bring about right relation between man and God. But besides this common knowledge upon moral and religious subjects there is a *science* of morals and religion for the study and exposition of which we are willing to sustain a particular class of men in the midst of us. It is because we wish to have our ordinary knowledge upon these highest of subjects made still more clear and vivid, and efficacious that we listen every Sabbath to one whose business it is to investigate and expound the *principles* of the word of God.

Thus it is apparent that when we go below the surface and get at knowledge in its solidity and substance we find it in the form of principles — we find it Science. Below all the manifold *uses* and *applications* of knowledge as they appear in the ordinary life of men there lies the great deposits of primary truth — inexhaustible in itself and

ever yielding new treasures to the educated and thoughtful mind. *Now with this lower region of truth mankind must have communication or their course is backward in all respects.* New inventions in the arts soon become old and pass out of use — what at first were striking facts soon lose their novelty — the old modes of presenting those truths which from their very nature are the same yesterday, to-day and forever, become wearisome — in fine the floating information of a community is soon worn out and becomes powerless *unless from the region of principles there is constantly coming off upon it, an invigorating influence* — unless the ingenious mind of a Watt or a Fulton now and then startles society and forms a new era in its civilization by a wonderful application of an old but buried principle of natural philosophy — unless the thoughtful mind of a Newton pours through old science the light and life of a new principle which to the end of time is to influence this domain of knowledge with as steady and extensive power as that of gravitation itself — unless the “mighty and passionate spirit” of a Luther awakens the religious consciousness of all Europe to the recognition of that great *primal truth* of Christianity on which man's eternal life hangs.

Having said thus much upon knowledge in its scientific and in its practical form and of the right relation of the latter to the former, we proceed to speak of *colleges as the institutions for keeping up this right relation — as the instrumentality whereby science and practice are kept connected and made to interpenetrate each other to their mutual benefit, and to the growth of mankind in knowledge.*

I. One way whereby colleges do this is by not suffering the distinction between scientific and practical knowledge to be lost sight of, and by keeping in existence an education which is based upon the study of first principles.

It is the aim of the higher institutions of learning to give what is called a “liberal” education — i. e. one which is distinguished from that given in common schools by being more extensive and more profound. The lower institutions of learning take the mind in the earlier period of its existence when it is best fitted for the obtainment of all that part of knowledge which is gained by the memory, while the college receives it at the beginning of that period when its powers commence their maturity, and it is prepared to get that knowledge of principles of which we have spoken, which comes from reflection. In the theory of education adopted by our wise forefathers, and (as history shows it) by all wise founders of commonwealths, the future citizen is to be surrendered to the primary school during the years of boyhood when the imagination and memory are active that he may learn to read and write, and

may acquire all that knowledge of geography and arithmetic, and history which is fitted for his years and which will be useful in the transaction of the ordinary business of after life. When the higher faculties begin to dawn and the years of reflection are coming in, he is then to be transferred to an institution which will guide him into the paths of science and introduce him into that world of principles from which he is to derive, if he ever does, high moral and intellectual power, and make himself a strong man among men. Colleges and Common Schools are therefore not to be opposed to each other. Each has its own proper work to do. The one cannot do the work of the other, and even if it could, yet boyhood cannot receive the instruction of opening manhood, and calm and reflective manhood craves a more profound learning than that which satisfies inquisitive and acquisitive boyhood. The two are not independent of each other like two different machines, but are living members of the same body, and therefore the one cannot say to the other, "I have no need of thee," nor can the other say to the one, "I have no need of thee."

Colleges are thus a standing evidence of the validity of the distinction between scientific and practical knowledge. Their aim is to give an education which will develop the *mind itself*, irrespective (for the time being) of the *uses* which may be made of learning, knowing that if there only be produced within the youth the *power* to work, the occasions and the incitements to exercise it will not be wanting in a world that is full of work. And they do this not so much by imparting an amount of separate facts of which immediate use may be made, as by awakening the mind of the young man to the recognition of first truths in the various departments of learning. It cannot be too carefully remembered that a collegiate, or liberal education, differs from what is called a common education by its having more than the latter can, the *powers* of the individual — the *mind itself* in its eye. Its object is not mainly to furnish the mind with enough to meet daily wants, but to fill it with power and to ground it in principles as a reserved fund upon which to draw at any time and during all time. It is a mistake to suppose that that only is useful knowledge of which an immediate and palpable use can be made in the acquisition of wealth, or in providing for the daily wants of the body. This is indeed useful, but it is not enough for all the exigencies of this life even, and it surely is not enough for those of the life to come. When revolutions in human affairs break out, when States are to be founded, when institutions that are to affect the progress of the race are to be established, when laws are to be made — when in short the primary and foundation-work depending upon primary and fundamental truths is to be done, then the liberal education shows itself

to be the useful education. In these trying times the reserved fund of mental power and clear intuition of principles may be drawn upon and its untold worth be seen in the origination of a great instrument like the American Constitution, or in the start of a great idea like that of popular liberty which is to work through masses of men with superhuman power.¹

We say then that if the distinction between the knowledge of principles and the knowledge of facts is an important one, the preservation of the distinction and the foundation of a particular sort of education upon it are still more important. Moreover, unless the current information of society is kept moving and alive by the presence and the power of a system of liberal education, and by those who are yearly coming out fresh from the contact with science and principles, it speedily diminishes in amount, and loses the vitality it once possessed, and society sinks down into barbarism. The reign of barbarism began in Greece when the liberal education of its young men fell into the hands of the sophists who substituted the denial and disputation of first principles for that clear and profound enunciation of them which characterized an elder day. When this class of public teachers appeared there was a great amount of useful knowledge current in Grecian society, but it soon betrayed the lack of that vigor which arises from the diffusion of correct principles in politics and morals and which had kept it fresh and healthy, and not many years elapsed before this whole mass of current and common information was found to be utterly powerless towards the preservation and glory of the State when threatened by Philip, and crumbled away like some noble shaft that has been struck with the sap-rot.

Neither let it be supposed that by making and preserving the distinction between a common and a liberal education any injury is done to useful and practical knowledge. It is only by the maintenance and widest possible diffusion of scientific learning, that this common everyday knowledge arises and is current; for the common information of society is nothing more nor less than the fine and diffusive radiance of a more substantial and profound culture. This light, spreading and penetrating in all directions, is an effluence from a ball of solid fire. All this general and practical information which distinguishes an enlightened from a savage, or (though civilized yet) ignorant state of society —

¹ For some excellent thoughts upon the relation of scientific to popular knowledge, see an article upon Theology by Ullmann in the *Studien und Kritiken* for 1849. The truly fruitful effort for the people and popular life, he says, is not merely the direct and immediate effort, but the thorough cultivation also of all those departments of knowledge whose results cannot pass over into common life except at second-hand and by radiation.

which distinguishes England and the United States from Africa and South America, did not grow up spontaneously from the earth; is not the effect of a colder climate or a harder soil. It has been exhaling for centuries from colleges and universities — it has been distilling for ages from the alembic of the scholar's brain.

The condition of society at any one given time, must be looked upon as the total result of past institutions. It is false and absurd to assume that the present form of things started into being in a twinkling, and is totally unconnected with what has gone before. This is true of all that enters into the idea of social existence, but it is emphatically true of the general state of information. And if we would know why there is at this present moment such a great amount of intelligence among the descendants of English colonists, and such an entire absence of intelligence among the descendants of Spanish colonists on this western continent, we have only to remember that the English brought over books and built churches and founded colleges simultaneously, while the Spaniards did no such thing, but attempted to found and perpetuate State governments, and to rear up society upon the current maxims of worldly and selfish policy. If when Hernando Cortez subjugated Mexico to the Spanish crown and provided for the colonization of that region, he had laid such foundations for national existence and growth as were laid by the Puritans, and that population for three centuries had been feeling the vigor of just principles in social intercourse, in legal arrangements, in government and religion, it would not be the ignorant and powerless mass it is. If he had provided for the investigation of the principles of knowledge, and for raising up a body of thoughtful and wise men, leading and powerful spirits, like those who planned and acted in the great emergency in our history, would not have been wanting in her hour of national trial.

II. And this leads us to notice a second way whereby the higher institutions of learning keep scientific and popular knowledge in connection, and thus elevate and improve the whole body of the people in a commonwealth. And this is by constantly sending out into society professional men.

Most of the members of the three professions are college graduates, and the few who have raised themselves to posts of honor and usefulness by their own resolute and private study, are no testimony against the fact that professional influence is based upon scientific knowledge. These few instances only go to show that if there is a fixed determination, a man may overcome all obstacles, and may become an eminent physician, jurist or divine, not *because* of the want of direct aid from the higher institutions of learning, but in *spite* of that want. And even

these do not acquire their knowledge entirely independent of universities. Even these must have access to a library of old books which one, with some degree of truth, has asserted to be the true university, and which at any rate is the expression of the thought and research of universities.

It may be said, therefore, without fear of contradiction, that professional life and influence grows out of collegiate education, and can grow from no other root. And if we would estimate the effect upon society of the decline and fall of the higher literary institutions, we must first estimate the effect of the entire removal from among us of the physician, the lawyer and the clergyman, and of the entire destruction of the three great sciences of medicine, law and theology. It is a forcible saying of Cicero, that the Athenian State could no more be sustained and regulated without that grave and venerable court, the Areopagus, than the world could be sustained and regulated without the Providence of God. With greater truth and force it may be affirmed that modern society might as easily be kept in prosperous existence without the Providence of God, as without the presence and pervading power of those professions whose province it is to investigate and expound natural, civil, judicial and religious truths, for they are themselves one of the most benignant of Divine Providences.

But we shall perhaps be able to form a more correct estimate of the worth of professional men, and consequently of those institutions which train them up, by an examination of the business and influence of each class separately.

1. It is the business of the physician to study the nature and laws of life, especially of animal life, and still more especially of human life, that he may understand the causes of disease and death. It is also his business to study material nature, that he may know the various elements that enter into it, and their relation to the chief practical purposes of his profession, viz. the preservation of health and the cure of disease. Setting aside, therefore, the palpable and immediate benefit which the individual derives from the medical man as he stands by his bed-side, there is an amount of information put in currency by him, which ministers much to that general cheerfulness and absence of anxious apprehensions, which, like fresh breezes and bright sun-shine, contributes much to the physical well-being of society. The investigations and influence of the medical profession, rid community of that superstitious dread with respect to the strange processes of nature and the wonderful functions of animal life, which indeed in its highest intensity is to be found only in savage society, but which in its milder but nevertheless most fearful form, marks the history of ages highly educated in

other branches of knowledge, but ignorant of this because its cultivation had not kept pace with that of the other. For example, whole communities in Europe during the middle ages were often set in a tremor by natural phenomena that would not startle the child of the present day, because the ignorant imagination of the age filled the (mysterious it is true, yet) beautiful and harmless world of vegetable and animal life with malignant powers and horrible spirits. And had there been as much general information regarding the science of medicine, as there was regarding those of law and theology among the early inhabitants of New England, that most strange and awful chapter in its history which records the story of the Salem witchcraft would be wanting. The gloom and horror (a gloom and horror which could not have been thicker and deeper if the world of evil spirits had really been let loose upon men) that hung over that community like a black cloud, could not possibly be made to throw its shadow across the present generation, not surely because it is *morally* better or wiser than its holy fathers, but because the strange marvels of animal organization and nervous excitement have been traced to causes originating in that "God who is light, and in whom there is no darkness at all."

2. It is the business of the jurist to study the principles of law — the science of justice. This science stands beside that of religion, and has very profound and close affinities with it. So very nearly are these two sciences connected, that history shows that where clear and correct views of the one have prevailed, clear and correct views of the other have also prevailed. In proportion as a community is possessed of a deep sense of the sacred nature of justice, it is possessed of a correspondingly profound sense of the solemn nature of religion.

The cause of this lies in the fact that justice, which is the substance and staple of law, is the most fundamental of all fundamentals, whether the being of the Creator or of creation is contemplated. Justice is the deepest of all the "deep things of God," underlying his whole Godhead, and "forming the equilibrium of the Divine character." Even mercy, an attribute which is sometimes supposed to be the very contrary of justice, and in necessary incompatibility with it, derives from it its very essential nature — its mercifulness. Mercy shows its distinguishing quality, its real peculiarity only in the light and flame of law, and no man has ever known and felt the mercy of his God, until he has first known and felt what his God might *in justice* do unto him.

Again the idea of justice is a constituent of man's being, and if, owing to his fall and corruption, the positive sense of justice is often slumbering, the negative side of the idea, the sense of injustice, of being wronged, is one of the quickest and keenest of which he is conscious.

For these reasons the science of law is no trivial or superficial science, but strikes its roots down into that solemn world of holiness and righteousness with which every man by creation is connected, either for weal or woe, according to the relation which his spirit shall be found to sustain to it in the day of judgment. If therefore the spirit of law and the sense of justice are deep and pervading in society, the truths of religion will be more fully apprehended, and its duties will be more likely to be esteemed paramount than would be the case if a lawless and unjust spirit were abroad. By being reverential towards civil law man in so far becomes reverential towards Divine law; for it is a power ordained of God, and the feeling towards that which is ordained transfers itself to Him who ordains. The doctrines of religion make their way far more easily through a law-revering and law-abiding people, than through a disorganized and disorganizing mass, held together by no right sentiment of any sort, by no just tie, civil or political.

Such being the fact, it is evident that the legal profession, if deeply penetrated and pervaded by the spirit of law and justice, is a most important instrument in the arrangements of Providence, for working out the well-being of the State and the improvement of mankind at large. By means of the study of the principles of justice, and the performance of legal business, law is constantly kept before the public mind, and its spirit is more or less permeating society. The mind of the people is made solemn in the process, and better prepared to receive the truths and principles of the Christian religion, to which great *remedial* and *saving* system of truth all other systems should be subservient and preparatory.

3. And this brings us to the third of the three professions whose foundation is laid by collegiate education — the clerical. The worth of this profession cannot be over-estimated if we take into account the importance of the science upon which it rests, the opportunity it has of getting the popular ear, and the perfecting influence which it is capable of exerting upon society.

The science which is the subject matter of the clergyman's investigation and exposition is that of religion. It must necessarily be matter of consciousness because its principles are practical as well as theoretic, and therefore, in order to their thorough apprehension, require entrance as much into the practical heart as into the speculative head. The principles of this science are addressed to the highest faculties of the human soul, and provide for its well being during the infinite portion of its existence. They therefore run deep and reach out wide, and both directly and indirectly affect the whole individual, the whole State, the whole race. Religion either as a power of salvation or con-

damnation seizes every rational being with a grasp never to be shaken off, and having made an entrance to his joy or anguish, is never to be expelled. If his whole being is brought into sweet harmony with its laws and truths, he dwells in heaven; if his whole being is alienate from its purity and holiness, it still remains, because it must (since he is rational), and he dwells in hell.

Religion, as its etymology denotes, is the great bond which is to hold the rational creation together and to God. There is no other bond of such strength and extent. All the other ties that bind finite spirits together derive their permanent power from this great vinculum, and if its Author should suffer it to be broken, the primitive material chaos would be but a faint emblem of the disorder and ruin that would reign in the intelligent universe.

Especially would man be the sufferer in such a tremendous catastrophe; for cut loose from all the restraints which natural and more especially revealed religion impose, the unchecked depravity of a fallen race would bring it into awful dissension and collision with itself.

Religious principles are therefore the most important of all. In the divine idea and plan all other knowledge is to derive its vigor and life from them, and they are intended to run through all the individuals and all the institutions of the human race. Through the arts and through the sciences, through the laws and the legislation, through the manners and the customs, through the thoughts and the opinions, through the individual life, the domestic and social life, the political life—in fine through all the immense material embraced in the whole being and action of mankind, this pure and mighty power is intended to stream.

But not only is the clerical profession important because of the magnitude of the science upon which it is based, it is also important because of the opportunity given to it for getting the attention of man. By divine appointment every seventh day of human life is given to this profession, that it may have a hearing. Wherever the Christian religion goes, be it into civilized or savage nations, the herald of Christianity has a set time to proclaim its doctrines, which is as regular in its coming as the rising of the sun.

This dedication of a seventh part of human life to the hearing of Christian doctrine is one of those many permanent arrangements of Divine Providence that exert mighty influences without observation. We may say what we will of the power of the press, and the rapidity of communication, and all the other engines of modern times for influencing and improving mankind, there is no instrumentality which for the kind and degree of its influence upon society is to be compared with the stated preaching of the Sabbath day. Think of the nature

of the truths preached — the magnitude and solemnity of the consequences connected with their reception or rejection — and then remember that through the length and breadth of this land and of all Protestant lands, in thousands of churches, millions are listening to the preacher — that the principles of religion, even when they do not effect a saving lodgment in the heart, yet give vigor and clearness to the intellect — that from these churches and congregations a strong and restraining influence is continually going off and diffusing itself through that portion of society which does not place itself within hearing of divine truth, and moreover remember that this does not occur once every year, but once every week, and estimate if possible the amount of influence exerted by the clerical profession upon the permanence and progression of society.

We have thus briefly considered the business and influence of the three professions, and it must be evident to every reflecting mind, as we turn back to their connection with scientific in distinction from practical education, and their origin in the higher literary institutions, that such education is invaluable and such institutions are indispensable. The decay and destruction of the higher literary institutions involves the decay and destruction of scientific knowledge, and of professional life, instruction and influence. It must be apparent even to the most superficial observer, that the removal and want of a physician, a lawyer, and a clergyman in a particular town, would work disastrously upon both its temporal and eternal interests. Cut off from all connection with professional life and influence, disease and the still more dreadful fear of disease would ravage it; not having the fear and reverence of law before their eyes because they have not its expounder and representative in the midst of them, a cruel injustice would rule in the breasts of the physically strongest, as unlimited as the selfishness of the human heart, and with no one to preach the truths and offer the consolations of the Christian religion, the population would become more brutal than the brutes, because the wants of *man* would be unsupplied. If all this is apparent to a superficial glance, what will he see who glances wide and deep, over and through a whole commonwealth, destitute not only of the system of liberal learning, but of those institutions and classes of men whose business it is to perpetuate, improve and diffuse it?

The result then to which we arrive is, that only by the maintenance and improvement of scientific education can even the common intelligence of the present age be preserved. This has its root and life in that more profound wisdom which is slowly evolved from age to age by the scientific, the liberally educated mind; which is "the result of

all his considerate diligence, all his midnight watchings, and expense of palladian oil." And those institutions whose proper office it is to impart this education, are not an accidental and unnecessary, but an organic part of State institutions, and should no more be torn off alive and bleeding from the body politic than any other members should be. The whole population has an interest in their preservation, because they have an interest in the preservation of courts of justice, of legislative assemblies, of the pulpit and Church of God. The solid well being of a commonwealth depends upon them. Their first founders on this continent were the Puritans, and they were among the earliest of the rock foundations laid by those wise men. The whole sound growth — the whole healthy development of New England has been directly connected with their existence and influence. Our benevolent and learned physicians, our judicious and calm-eyed jurists, our serious and thoughtful clergy have been trained up in them. And finally, they have ever been great defences against the downward tendencies of human nature when left to itself, by cherishing in the public mind that conservative veneration for law and order and intelligence and morality, which is the best of all preparations for the reception of the saving doctrines of the Christian religion.

ARTICLE VII.

INTRODUCTION TO THE BOOK OF JOB.

Translated from the German of Ludwig Hirzel, by Rev. William C. Duncan, M. A., of New Orleans.¹

1. *Contents of the Book.*

GENERAL VIEW. — Jehovah resolves to test the virtue of the pious Job by misfortune and sufferings, and executes his determination.

[¹ L. Hirzel is professor of theology in the university at Zurich, Switzerland. His Commentary on the book of Job, the Introduction to which is here given, forms the second part of the "Condensed Exegetical Manual to the Old Testament," which has been in the process of publication for several years, at Leipsic. The Introduction is inserted in our pages as the fruits of the studies of an able and experienced critic, and not because we are prepared to accord with all his views. Indeed we decidedly dissent from some of them. But it is not necessary here to