

## METHOD AND FACT

In any teaching of a field the educating of the teacher is one of the most crucial ones to be investigated first. There are two concerns. First, the beginner is introduced to the vocabulary and the practices now in force in the field which he wishes to pursue, teach and help further. Secondly, researchers already familiar with and proficient in the field, transmit its current state and reflect upon the basic assumptions which have brought it to its present state. They will demonstrate how to test these in light of more current research and how to set the limits of the understanding of the field. These reflections upon the foundations of the given field address themselves to other researchers familiar with the field, and their results will find their way into basic texts only when they cause a major re-shuffling of basic premises and practices. A case in point is the development of new techniques for the teaching of mathematics based upon the work done in the last hundred years in the logical foundations of mathematics and in set-theory. Children in elementary school are learning to deal with notions seemingly very abstract as a matter of course simply because it has been discovered that only a mistaken tradition stood in the way of a proper classification of the notions involved. Theories unavoidably have a deforming effect. On the basis of their assumptions educated guesses are made as to the most plausible direction research and teaching should take, and only very destructive evidence causes a re-examination of these assumptions. Even then, as testified to by the epic battles around the question of the Copernican system, or spontaneous generation, relativity physics or the quantum theory, researchers will go to any length to preserve what they deem established. The same can be said of politically designed conceptions, such as juridical systems. Teachers and researchers must learn to engage in critical review that focuses on basic assumptions. Some philosophers have given the results of their critical review (Descartes, Locke, Hume, Kant, to name some) but they have felt called upon to do so in the form of alternative system. Others (the positivists of all hue) have thought it simpler to peg their philosophy to the contemporary state of some sciences in order to keep abreast of these developments. In so doing, they abandoned the role of critic. Be this as it

may, the teacher, who is also a researcher, must understand that what he presents to students as a “fact” must be carefully delimited. The reason for such delimitation rests on the previously mentioned equivalence of all subjects and the equivalence of all subject matters that are being taught in schools. There is not yet any criterion that would propose a scale of values among the variety of fields. Each one is just as good as another.

## MATTER OF FACT

What is a "fact"? A fact is a state of affairs the public description of which is not solely dependent upon the unique circumstances of a single individual. The occurrence of this description may be so dependent, the subject-matter of the description may be so dependent, the description itself as an act performed may be dependent thus, the description as an object, however, must be public and, as representative of the described, must focus primarily if not outright exclusively on these aspects of the described deemed exemplary--i.e. independent from the historical and psychological uniqueness of the circumstances described. This independence may seem ambiguous in that it involves not only 1) the independence of the description itself, as a new public "object"; but also 2) the independence and transmission of some of the features described, chosen because of this transmission. Any "description" may be public in the way mentioned by virtue of 1) even when what is described is itself not amenable to independence in sense 2). To establish a matter of fact, however, we would maintain that independence 1) and 2) have to be achieved in one and the same description. The case mentioned above, where 1) is achieved but not 2) is the case characterized as that of "proper sense." More obvious examples can be used to show the way a field or subject matter is delimited and matters of fact are established. An example from a legal system ought to suffice.

To arrive at a required description is the role lawyers and investigative officers assume as they compile and compare the accounts of diverse witnesses to a particular event. All factors indicating that some element in the description attaches solely to the unique circumstances of a single individual (drunkenness, myopia, psychological disturbances either pathological and prolonged or momentary, and the like) are sifted and their bearing on anyone description evaluated. Critical questions of essence are

answered on the basis of these evaluations and eventually lawyers, judge and jury come to the final confrontation with the "evidence" and decide whether or not the event in its public description essentially fits as an example of "premeditated murder", "accidental homicide", or whatever, as the case may be. First the testimony is sifted, then the final picture is tested to see if, on the basis of the "facts", what looked like premeditated murder still fits the essential features of such or whether, in the sorting process some essential features have disappeared the lack of which transforms the "matter of fact" into a case of (an example of) accidental homicide.

"Selective description" is the process according to which an event occurring in the stream of lived experiences of a subject is made intersubjectively validated by the process outlined. This means that the subject matter is accessible to anyone capable of performing the activities described so far. It is one mark of educational process to see who can perform such activities in correlation to a given field. Although the example chosen is the co-operative effort of a criminal trial toward "matters of fact", the example should not stand in the way of understanding other fields. Obviously errors of justice, as in any other field, are made often enough for disquiet concerning the genuine independence of the matters of fact from the unique circumstances of some single individual. All too often what is taken as such is not really such in the actual case. But this only reinforces the point made by giving an example of a failure to fulfill the requirements specified: miscarriages of justice occur when--unknown to judge and jury (one would hope!)--some single individual succeeds in presenting **as** independent from his volition a description intimately subservient to it. Nor should the illustration given suggest that only in this kind of cooperative effort are "matters of fact" properly described. A closer look at the procedures of such a trial reveal that each individual participant (witnesses, lawyers, jury, judge and defendant alike) are asked by the situation to test for themselves each individually the descriptions they hear against previous descriptions and, for the witness and possibly the defendant too against their rememorated lived-experience of the event.

Hence, everyone must sift and test and attempt to fulfill the overall aim of making the description itself independent of private circumstances. Eventually each juror will have to pit

unaided his own "model description" against those of his cojurors not (ideally) on the basis of pride of authorship, but on the basis of its **independence** from himself. That is why prospective jurors whose beliefs would render them unable to fulfill this ideal, are sorted out and disqualified or should be. A better analysis of this example shows each individual singly, in the privacy of his own subjectivity, performing for himself the "selective description".

A further comment to be made here concerns the next step to be taken by each juror in exclusive communion with himself: "exemplary generality". Once the "matters of fact" have been established to his satisfaction, the juror must look upon the individual and particular case thus pinpointed as a member of a well-defined, open group comprising all lived-events which differ from one another **only** in the specificity of the circumstances of their occurrence, and **not at all** in some basic features deemed essential. The case is tested for such basic features and is looked upon as a purported example of "premeditated murder" or "accidental homicide" and as such it presents itself as fulfilling or not fulfilling in whole or in parts the requirements prescribed by such a role. "Taking something as an example" and "selecting essential features" are synonymous expressions describing the act of "selective generalization" or "exemplary generalization", two nearly synonymous expressions. "Selective generalization" points to the removal of the unique and private circumstances or features from the matter of fact; thus described as the representative of a complete group. It is to be noted that a particular juridical system also lurks in the background and can be investigated in its own right.

At this point some may feel tempted to reinforce the "objectivity" of exemplary generalization by some sort of statistical corroboration or some other form of quantitative inductive generalization. The problem is that there can be no quantitative inductive generalization except on the basis of all three moves described above. One has first to achieve the public description of a state of affairs in order to have the matter of fact with which to begin a collection of instances. Before one can collect any kind of sample grouping, or even specify the conditions ruling such a collection

as well as the recognition of control groups, both selective description, abstractive generalization and exemplary generalization will have to have been performed. They will confer on the statistical sampling and the quantitative induction the frame which gives them continuity

The "object" obtained by public or independent description, generalization and exemplary generalization "transcends" by essence the concrete individual circumstances within which it is presented. The lived occurrence: a car almost ran over me, becomes the sentence "a car almost ran over me" which fits but does not belong to, the particular event it describes since this event and the sentence could serve as well for your event as for anyone else's exhibiting the same essential features. Hence the sentence "a car almost ran over me" has a presence other than (1) that of the event it describes, (2) that of the instance of its being uttered, or written, or read, or heard, (3) its local occurrence in any of those forms or streams of lived experiences - by being independent from anyone stream of lived experiences. This realm may indeed have traces in a specific stream of lived experiences -- in this case the actual marks on paper or sound waves -- but it is not **in them**; rather they point to it as **other** than they. This realm **transcends** its traces. It is **ideal** rather than real: it is the **transcendental level**, the level properly reached by **formal generalization**. To reach this level is the **sine qua non** for a field and although fields may differ in subject matter, principles and heuristic methods, they all have at least this in common, that the matters of fact on which they base their findings, have all undergone at least the full formal generalizations described here.

Specific fields, such as Classical Physics, require that all its "facts" be described in terms of magnitude alone. This requirement is over and above the more fundamental one requiring only an independent description. There is no essential move from the initial fundamental requirement to the more specific one limiting the tools of description to "magnitude" only. The descriptions given here did not involve magnitude, yet they did involve "matters of facts" as well as generality. We were able to arrive at descriptions independent of anyone single individual, ranging generally and unequivocally, over all possible similar instances, and providing as well the

definite conditions under which they wouldn't apply in anyone single case. These are the basic requirements of any field. These requirements are fulfilled by the limitation to magnitude, but it is wrong to assert that only the description of magnitude can guarantee their fulfillment. Hence there can be science when the fundamental demand for independent description and formal generalization is met, whether or not it is met by the description of magnitudes.

Phenomenology in this sense is an attempt to establish just such a fundamental conception, in some cases called transcendental. But this holds even when the subject-matter of the description is not itself eidetic or transcendental in nature. Take for example the above discussion on the sentence "a car almost ran over me": there is nothing transcendental about being "almost run over", yet this sentence is generally representative for any and all specific such instances no matter what the actual circumstances might be. The lived event the sentence denotes furnishes the essential features the sentence expresses; these essential features are lifted out of the particular experience by a selective generalization. An independent but not selective description would include many particular details which would prevent the paragraphs expressing them from being representative of anything but this one uniquely lived instance. This would not be a transcendental phenomenological description in the sense used here. On the other hand a far richer description than the one obtained with the sentence "a car almost ran over me" could be given, involving as many of the essential features such an experience possesses "for anyone": such a description, although its "lived" subject-matter would be neither "eidetic" nor "transcendental" does not prevent us from raising "questions concerning its essence" and hence would place itself and the object it expresses--the essence sought -- at the eidetic or transcendental level. Such a description would be the eidetic description of the essence or *eidos* of a non-eidetic object.

If we take up again the example of the use of the sentence "a car almost ran over me" given above we find that there are very many situations in which it could conceivably be properly applied. We find also that each of these situations could be

described in itself in such a manner that it would be exemplary (i.e. define an open group of possible such instances). That is to say: the factors closing the group have nothing to do with the particular structure of the group itself, but depend rather upon essential laws governing the group within which this group may fit. The group “I was almost run over by a Cadillac” will appear as a closed group on the **empirical** basis of what we know about Cadillacs and Cadillac-making. This has nothing to do about the **actual** structure of the example which says nothing concerning empirical limitations. “I” can be **almost** run over by countless imaginary Cadillacs countless times: the group thus defined is open solely because **its essential structure says nothing as to number.**

If I were to talk about the fingers on the hand of a five-fingered animal, although the number of such animals is left open, the number of fingers per hand is not and anyone hand could produce only five exemplars of such a group member the group of which would then close itself of itself. That is why six fingered animals belong either to a different species or are construed as “monsters” whose odd hand-configuration has to be “explained” by an appeal to a different grouping: the group of genetically damaged five-fingered animals, i.e. group so-defined that the number of fingers it might exhibit ideally is unlimited in the structure of the group either in less or in more. Or, to put this in a different way, we have removed from the example an essential feature without which the example is no longer an example of what it was supposed to represent. Other respects have remained equal, obviously, and so we still want to talk about five-fingered animals, but we have to do so in a negative or limited way. The “monster” is a five-fingered animal who does not fit the example in the one specific instance in which he is meant to fit: five fingeredness, but who should , according to other indices. And I know that he should on the basis of the closed-group of fingers deemed exemplary. Hence the exemplary group of fingers is limited as to number in its essential structure, although this in no way limits the group of five-fingered animals the structure of which contains no specification as to number at all.

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The distinction between groups the essential structure of which is limiting as to

number and groups the essential structure of which has no such explicit limit is fundamental to all we have to say here. On it is based the distinction between the eidetic level and the empirical, the distinction between formal generalization and quantitative generalization. Quantitative generalization goes beyond the finite group of samples quantified **only** by statistical projection. It is therefore at the mercy of the specific state of affairs in anyone single case not as yet collected, or any wider group of cases not as yet collected which may cause the statistical projection to be revised. This is both its defect and its strength: quantitative generalization presents itself as tentative and open to revisions according to specific empirical procedures usually grouped under the heading "scientific" or "empirical" methods.

Yet the essential delimitation is different, as noted in the example with a car. Most people would take it for granted that all I wanted to do here was to recount one particular incident of my personal history, according as I might accent my tale, my account might take on different meanings when located in different horizons of awareness available to me from others. It might be an instance of carelessness. It might be an example of independent lines of causation crossing to create an open or chance happening. It might be the beginning of a highly personal encounter with “fate” introducing a meditation on singular divine intervention leading to a religious conversion, a “privileged moment” affecting the whole subsequent course of a lifetime--such as was experienced by Paul Claudel, for example, or Pascal. Hence, while my story may be taken as exemplary of a small traffic incident, or as an instance in my own personal life without such exemplary dimensions, it may also receive other meanings without any change in the basic features of the happening itself. As a matter of fact, the “happening itself” appears to be one more possible meaning from a series I may intend on the basis of what actually took place. One and the same object may be the basis for widely different descriptions depending upon the essential features selected.



Hence to choose one particular description and to accord it right of privilege over all the others is a self-warranting action only in the light of what is intended by such a choice. If I want to give an edifying instance which has transformed me from the dullard I was into the bigot I now am, and proceed to talk merely in terms of an example of carelessness in crossing a street or in driving a car, my audience will rightfully ask themselves what the one has to do with the other. Only when I begin to introduce in my story elements interpreted by me as indicative of the personal attention of an irate divinity will the tale fulfill the intention attributed to my recounting of it. Some may still quarrel with its appropriateness, but they will have to do so on the terms of my account, given my intention in telling it, and not because my account did not provide for the requirements of the intention I specified I had, i.e. in both cases the discussion centers on the appropriateness of the tale to the intention.

The same dependence upon an intention of signification may be demonstrated to hold in every instance of descriptions of a matter of fact. If all I want to talk about is an example of a "close call" due to someone's hurry, and I add to my account musings upon "independent lines of causation" and "indeterminism versus determinism", these addenda will rightly be judged superfluous at one level, but relevant to another – e.g. scientific or theological. If all I am asked is what is needed for a police report, mentions of "the Lord" or of "determinism" will not be retained by the traffic cop. The incident itself may support all of these signification as well as many others too numerous to mention, too esoteric to think of such as, for example, the philosophic use I am making of it right now.

Any one "matter of fact" can be the objective referent of any number of radiating intentions each offering a different perspective upon the particular matter of fact, each with meaning in its own different way, (one is reminded here of the old "Winner at Jena and Vanquished at Waterloo," textbook examples) each therefore presenting its own aspect of that matter of fact, each doing so more or less felicitously--as per its own terms. Between the signification, the

meaning, and the objective referent or matter of fact which "fulfills" or "supports" it, a distinction has to be made which is different from the distinction between the actual state of affairs and the essential features of the matter of fact. There are here four terms: the intention of signification, that signification, the actual state of affairs and the essential features of that state of affairs publicly described or as a matter of fact. The essential features of the "matter of fact" are the "reason" of the series of possible significations the matter of fact supports: they "appear" **through** every member of the series--that is how a member of the series is recognized--but they are not anyone particular series-member: if they were this one member, there would be no series because what binds the series together is the ghostly presence of its ratio of the series itself, its specific differences from every other purported member would become essential (exemplary or defining) distinctions which would prevent us from assimilating them the one with the others. The imaginary variations which enable us to recognize **similitude** among purported series-members do so because they aim at an ideal identity of essential structures apprehensible when specific features of each series-member are imaginatively removed--though in reality they remain untouched--and by their removal lead from one member to the next.

Thus the convert, the policeman, the indeterminist and the philosopher may all agree that they are talking about a traffic incident when each is willing to remove from his view of the event those features which the others do not share; this does not make this particular view privileged over others: it is only what they have in common, i.e. what is visible **through** each but belongs exclusively to none in particular. (Bear in mind that for the policeman or the insurance man a traffic incident comprises features to which neither convert, nor indeterminist nor philosopher need be sensitive): it is apprehended **through** each, embodied **in** none. The ratio is not itself a series-member and requires a particular view (formal generalization) of a series-member for its apprehension: a particular view, that is to say a particular intention, one whose object is an essence, an eidetic intuition. The series-member then appear as one possibility among many; some of its features appear removable not simply because they are mired in particularity but because they are dependent upon an intention of signification other than the one intuiting essences. The ordinary intention of signification fulfilled (or answered) by a particular series-member must be replaced by another intention which tests **both** the

previous intention of signification and the object fulfilling it **together** for features dependent upon the previous intention specifically and not transposable to the object of any other intention.

## RESPONSIBILITY

From what has been said it is clear that the presumed “empirical person” cannot be posted as a standard by which to decide the human question. What was noted with regard to the self and ego, leading to poli-centric field and history, the self is always more than an ego. This more is constantly lived and assumed set of phenomena pertaining to this subject matter: the human is more than what is given at present. Various terms have been used to express this “more” ranging from potential to possibility, impossibility and even infinity. This suggests a common recognition that this “more” has to be disclosed, revealed, actualized or realized. It can be claimed that even philosophical anthropologies belong in this framework when they proclaim the human as an “unfinished” being, or when the globalizers on various continents demand for all sorts of technologies, assistances, and expertise to help “develop” the indigenous populations. All such notions suggest that there is a human dimension that has to be brought out, educed, educated and thus fully actualized. Perhaps even all the furious revolutions to abolish alienation rest on this phenomenon of “more.”

To begin with, the unfolding of the more is also related to the phenomenon of radical diversity of human occupations, interests and above all abilities. In this sense it would be impossible to prescribe an education policy that would treat everyone as “equal.” Yet as was noted, originary equivalence is a condition, but it will have to be treated in its unfolding through differences. What is significant that among interests and capacities of each individual, there can emerge the “highest capacity,” and do so through the process of education. The bringing out of such capacities and their exercise in society leads to the fulfillment of a person’s life and even to happiness. This means that to be able to exercise one’s highest capacities is to be satisfied with one’s life, while to be placed below such capacities could be deemed unsatisfactory. In

turn to reach beyond one's capacities is also dissatisfying both to a person and to society. To insist on becoming a doctor when one cannot endure the sight of blood or pain will not lead to being a good doctor and thus will be disservice to society. Yet to be able to become a doctor and be allowed to reach the capacity of an inadequate mathematician is again disservice to the person and to society. It could even be said it would be unjust to both.

It ought to be obvious how education becomes relevant. At the outset we do not know our own capacities nor those of others. They are a potential to be unfolded through the process of education, i.e. they will be discovered by allowing each individual, each youngster to be instructed and tested in all available disciplines in order to discover, very slowly what a youngster can do best. Here a distinction should be emphasized between what one likes and what one can do best. A youngster might not like algebra, but she might be better in this discipline than in another one that she likes but can hardly master. We cannot confuse satisfaction or even happiness in doing something well with some sort of invented psychological feelings. Psychological education is not an appropriate way of treating youngsters. Once again, the educational system must allow equal access and requirement of all youngsters to be introduced to every subject matter in order to discover what he/she is best suited for. There cannot be a priori decisions either on the basis of "aptitude" tests as if to discover what someone is good for, or on the basis of preferences for a subject matter by a youngster or by his/her guardians. Tests usually rate individuals statistically but cannot predict individual cases. Only a protracted engagement with a task or a discipline can reveal the level of capacities. The beauty of human life lies in the variety of human abilities, each, in its difference from others, reveals the richness of life, its open horizons one through the others.

The richness has a basic outline: to actualize her potential, she needs others to the extent that the actualized capacities are inadequate to fulfill all of her needs – for the latter she needs others with different actualized capacities. Thus the fulfillment of her life is coextensive with the unfolding of the capacities of others and resultantly the

correlate fulfillment of their lives. Actualization of one, is an actualization of others but in such a way that each is aware of the importance of the capacities of others for mutual fulfillment of the variety of needs, from daily necessities to cultural creations. The latter are just as much needed as other necessities – as shall be seen later. Such awareness is required in order not to fall into the sense of false security of being “self made man” completely independent of others and perhaps even most significant in relationship to them. It is to be noted that there was no mention or decision as to which capacities are more important over others. At this level of unfolding the “more” all capacities are equivalent to the extent that they comprise mutual contributions to one and all. It must also be stated that there is not yet the question of the priority of individual over society or society over the individual: both are mutually founded-founding – well argued and defined by Husserl in his *Communal Spirit*.

Underlying the treatment before the law or the rules of society there is the respect for person’s potential and its actualization to full capacities as a requirement for a person and for the entire society. In this sense the task of education and the educator is to lead each person to the discovery of what she can do excellently. Correlative to educational process is the movement from situated limitation and narrow mode of being to openness and thus expanding freedom through the contribution by others present in a given tradition. After all, what a person can achieve by virtue of her inherence in a tradition is something she could not achieve on her own. Being with others, even with those with whom we carry a dialogue through texts and stories, open and enrich us, offer us options and thus extend our freedom. Human freedom is, in this sense limited and conditioned, but not closed and determined, since it is education that allows a transgression of the limits toward the more, but never toward a full and unconditioned autonomy, even if the latter might be deemed a final goal of human emancipation. There is, therefore, a constant tension between a person and the conditions in the form of limitations and their transgression, of being conditioned and at the same time subsuming those conditions in one’s own life through education; the latter mediates a person through a tradition, and shows how the tradition functions

and what options it offers. Education thus adds to the individual and society a dimension of freedom and openness, orientation and a greater range of options.

While human potential can unfold in a great variety of abilities, the latter provide a ground, but not a complete fulfillment of human openness. It is in the ways the openness is shaped that a greater variety and orientation of the fulfillment reside. In this sense, the responsibility of the educator is not only in bringing out of a set of fixed abilities, but also in the concrete formation of them leading to direct, perceptual fulfillment. Lacking a formative orientation the best of abilities may remain diffused or assume a detrimental function for the individual and society. The implication for such channeling is valiative. One may have the greatest talent in nuclear physics and could build weapons of mass destruction for any government; yet the question of valuating such a capacity demands that it be employed for the benefit and not the destruction of others. As the physicist Taylor once quipped, we cannot allow a development of barbaric expert geniuses under the guise of pure science. We may recall few decades back during the cold war, Gabriel Marcel wrote about our societies bereft of education for scientists to make decisions of what is valuable in their sciences and what is not. A person working in a sophisticated laboratory calculates the destruction of lives during the first nuclear exchange – 60 million on one side and 70 million on the other side; then he goes home, kisses his cat, dog, children and wife and says “I love you,” while just having calculated their death. Such a person has not yet reached his full capacity in education, and the educator has not fulfilled her responsibility, because the recognition of one’s highest capacity is, in the first place, a recognition of its value to oneself and to others. The negative affect on others of one’s own abilities is equally a negative affect on oneself, since the prevention of the unfolding of the other is also a limitation on one’s ability to recognize what is available on the more for the total society. One’s own abilities carry a partial formation of the others and conversely. Limitation and openness are mutual notions.

The question is obvious: could one perform an action which violates the others without violating oneself, and could one violate oneself without violating the others?

By “violation” is meant a diminishment, thwarting, or destruction of human self actualization in the social world. By violating another in this way one is diminishing her possibility of actualization of her potential and at the same time one closes ones own actualization insofar as one closes the capacity of the other to reveal a way of being human which has never, and perhaps will never occur to one. An educator who takes the capacities of a youngster either in terms of statistical group, or in terms of tests without first exposing the youngster to various fields and disciplines, is closing the possibility of the youngster to discover what she can actualize as her best ability and thus is closing the contributions that she might make. Instead of becoming an actualized person, she remains a potential that is wasted, lacking an opening to increased freedom and concrete participation in a concrete social life.

Following the equivalence of intersubjective awareness and of the diverse fields of learning, it is also necessary that the educators and their students be made cognizant that no field is worse or better than the others, since each contributes concretely to the “free” activity of others. By “free” is mean the ability of a shoemaker to make shoes for others without having to make his own bicycle, or teach his children algebra, as well as for the teacher to be able to pursue the advancement of algebra without having to make his own shoes. Each would not be free to pursue the excellence of a craft without the others. Each person, engaged in her own craft is just as important than any other. When one delivers one’s auto to a garage to fix the brakes, the mechanic, who is excellent at his craft, is just as important as a professor of philosophy, since one must trust the mechanic with her life. At this level, the reward for pursuing a craft to its current level of excellence is a reward in itself. It is suggested here that it is possible to treat the unfolding of abilities as ends in themselves and only in a secondary way as means to other ends, such as rewards for a job well done. In this sense, the pursuing of one’s excellence is primarily the level of dignity and self respect of a person and at a secondary level, a value to society.