Chapter 5 Public Instructional Education

§1. Terminology

Chapters 3 and 4 have established what we are to understand a real Society to be, what the prime objective of a Society's institution of education is, and what role education plays in the growth or breakdown of a real Society. The fall of a Society reflects a failure in its education institutions, *viz*. failure to adequately educate citizens in the meaning of the Community's social contract. In this chapter we turn to one of the institutions of education necessary for the success and continued *Existenz* of all medium to large Societies. This is public instructional education.

We will understand the term *education* to mean the acquisition, development or perfection of knowledge, skill, mental capability, practical character or aesthetical taste by an individual. This is a practical definition that understands the non-technical language of dictionary contexts of the word "education." We will understand the term *instructional education* to mean *education by* means of the transmitting of knowledge, etc. to a pupil or student from a teacher. We will understand the term *public instructional education* to mean *instructional education available* and conveyed to all citizens or potential citizens of a Community through systematic institution of schooling in which the teachers are agents of the general public. We will understand the term **private instructional education** to mean instructional education available and conveyed only to select pupils or students by means of a teacher or teachers who are engaged to teach by specific individuals in a joint personal enterprise in which the teacher or teachers do not act as agents for the general public. The term general public means the citizen members of a Community regarded as a corporate person. We will understand the term school to mean a systematic institute for which the primary function is instructional education. A private school is a school for which the primary function is private instructional education. A *public school* is a school for which the primary function is public instructional education.

For a number of years now I have been dissatisfied by the indistinct usages to which the terms "pupil" and "student" are commonly put. My discontent does not arise as much from the usual dictionary definition of "pupil" as it does from the ambiguity one encounters when asking, "Is there a difference between a pupil and a student, and, if so, what is it?" Regarding any learner as *pupillus* raises a host of social contract issues, many of which are potentially divisive.

According to Webster (1962), a pupil is: (1) a person, especially a young person, who is being taught under the supervision of a teacher or tutor, as in school; *or* (2) in civil law, a minor under the care of a guardian. The second dictionary definition derives *directly* from the Latin *pupillus*. Definition (1) is a transference of the original term, a shift in definition that came about sometime during the Dark Ages, and the word "pupil" in modern English descends from the extended French word *pupille*, which in its turn descended from *pupillus*. The two definitions of pupil are connected only by the social convention of an "age of majority" marking a legal distinction between a minor and a major (i.e., an elder or adult). The practical implication in the transference is that a pupil is regarded by the citizenry of a Community as being someone who is intellectually immature, requires caregiving, and must be protected from consequences of his own actions by being denied the liberty of making his own free determinations of how he will live his life.

There is, however, a civil contradiction inherent in this because this sort of social casting means in effect that a pupil is a person who is not to be held morally culpable for his own actions. Such a person is therefore not competent to agree to be bound by a social contract, hence *must* be regarded as a social outlaw and *cannot be a citizen* of the Community. But this being so, then he also comes under no constraints or protections of civil rights, is not constrained to *civil* liberties, and may exercise *any* of his natural liberties. At what point, then, is the merely *legal* distinction to be made for regarding him as competent to make his own self-determinations, competent to enter

into social contracts, culpable for his actions, and eligible to become a citizen? Clearly the members of a Community have a civil right to determine their own membership (right of association), but what is overlooked by most laws defining "age of majority" is the unalienated liberty of citizen-parents in regard to the extent to which the Community is allowed to determine how *their* children are to be treated. Such social conventions also disregard the fact that children do form their own mini-Communities and mini-Societies, and therefore inherently constitute an outlaw mini-Community within the larger civil Community. In educational contexts, admixing the connotation of "pupil" as a learner and "pupil" as a person present among yet not actually part of the citizenry raises many difficult issues *for the justice system* of a Society.

Ambiguity also attends the Webster definitions of a student, i.e., a student is: (1) a person who studies or investigates; as, a *student* of human nature; *or* (2) a person who is enrolled for study at a school, college, etc. It is clear that the two dictionary definitions of "student" make homonymous usages of the word. It is equally clear that the second definition of "student" is synonymous with the definition of "pupil" *except* for the hopelessly ambiguous phrase "especially a young person" in the latter's definition. At what point in life is a person no longer "a young person"? Who gets to name the standard to which people are compared and pronounced "young" or "no longer young"? Like the legal term "age of majority," it is obvious that any definition by fiat can be nothing but a convention. Webster's first definition of "pupil" weakly attempts to avoid the social issues inherent here by simple ignórance of the issues.

If we are to make any fecund scientific use of either of these terms we must understand them practically and crisply. We will understand the term **pupil** to mean a person engaged in educational Self-development under the direct supervision and guidance of a teacher and whose educational activities are all concretely determined, planned and guided by the teacher. We will understand the term **student** to mean a person engaged in systematic educational Self-development whose educational activities are self-directed and focused upon a specific topical subject-matter he intentionally seeks to understand or master for his own purposes.

A student, therefore, might make use of the guidance or assistance of a teacher, but whatever educational activities he eventually undertakes are specifically determined and planned by himself and not by the teacher. This definition is in better keeping with the Latin root of the word "student," i.e., *studere*: to devote oneself (to a specific activity or study, the attainment of some object, etc.), concern oneself (with), concentrate (on), strive after, etc. By contrast, whatever is systematic in the educational activities of a pupil owes its architectonic to the teacher, and the pupil might or not be "devoted to" the subject-matter of his educational activity.

Insistence on crisp technical terminology in a science is not a matter of merely satisfying some personal and aesthetical judgment of taste. As Lavoisier said, the word should produce the idea and the idea should be a picture of the fact. A blurry picture is of little use. Where the distinction between pupil and student is vague, so too is the distinction between effective and ineffective education institution and method. Furthermore, this vagueness has led to transcendental errors in understanding the social atom of institutional education, namely the learner himself. Although Dewey was not a Kantian, he did nonetheless recognize this and understood the problem as mental physics teaches that it must be understood. Dewey wrote,

To "learn from experience" is to make a backward and forward connection between what we do to things and what we enjoy or suffer from things in consequence. Under such conditions, doing becomes a trying; an experiment with the world to find out what it is like; the undergoing becomes instruction – discovery of the connection of things.

Two conclusions important for education follow. (1) Experience is primarily an activepassive affair; it is not primarily cognitive. But (2) the *measure of the value* of an experience lies in the perception of relationships or continuities to which it leads up. It includes cognition in the degree to which it is cumulative or amounts to something, or has meaning. In schools, those under instruction are too customarily looked upon as acquiring knowledge as theoretical spectators, minds which appropriate knowledge by direct energy of intellect. The very word pupil has almost come to mean one who is engaged not in having fruitful experiences but in absorbing knowledge directly. . . . The intimate union of activity and undergoing its consequences which leads to recognition of meaning is broken; instead we have two fragments: merely bodily action on one side, and meaning directly grasped by 'spiritual' activity on the other.

It would be impossible to state adequately the evil results which have flowed from this dualism of mind and body, much less to exaggerate them. [Dewey (1916), pp. 153-154]

Dewey's thesis here is recognized and acknowledged today – although I would say more Platonically than it is practically – in education theory. "Active learning" is a common buzzword among professional teachers. Even so, one frequently encounters a disconnect between theory and practice that leaves schooling little different than the practices that were common in Dewey's day. He wrote,

[If] we put before the mind's eye the ordinary schoolroom . . . we can reconstruct the only educational activity that can possibly go on in such a place. It is all made "for listening" – because simply studying lessons out of a book is only another kind of listening; it marks the dependency of one mind upon another. The attitude of listening means, comparatively speaking, passivity, absorption . . .

There is very little place in the traditional schoolroom for the child to work. The workshop, the laboratory, the materials, the tools with which the child may construct, create, and actively inquire, and even the requisite space, have been for the most part lacking. The things that have to do with these processes have not even a definitely recognized place in education. They are what the educational authorities who write editorials in the daily papers generally term "fads" and "frills."...

Another thing that is suggested by these schoolrooms . . . is that everything is arranged for handling as large numbers of children as possible; for dealing with children *en masse*, as an aggregate of units; involving, again, that they be treated passively. The moment children individualize themselves they cease to be a mass, and become the intensely distinctive beings that we are acquainted with out of school . . . On the same basis is explicable the uniformity of method and curriculum. If everything is on a "listening" basis, you can have uniformity of material and method. The ear, and the book which reflects the ear, constitute the medium which is alike for all. There is no opportunity for adjustment to varying capacities and demands. . . . It is in response to this demand that the curriculum has been developed from the elementary school up through the college. . . .

I may have exaggerated somewhat in order to make plain the typical points of the old education: its passivity of attitude, its mechanical massing of children, its uniformity of curriculum and method. It may be summed up by stating that the center of gravity is outside the child. It is in the teacher, the text-book, anywhere and everywhere you please except in the immediate instincts and activities of the child himself....

If we take an example from an ideal home, where the parent is intelligent enough to recognize what is best for the child, and is able to supply what is needed, we find the child learning through the social converse and constitution of the family. There are certain points of interest and value to him in the conversation carried on: statements are made, inquiries arise, topics are discussed, and the child continually learns. His states his experiences, his misconceptions are corrected. Again the child participates in the household occupations, and thereby gets habits of industry, order, and regard for the rights and ideas of others, and the fundamental habit of subordinating his activities to the general interest of the household. Participation in these household tasks becomes an opportunity for gaining knowledge. . . . Now, if we organize and generalize all of this, we have the ideal school.

There is no mystery about it . . . It is simply a question of doing systematically and in a large, intelligent, and competent way what for various reasons can be done in most households only in a comparatively meager and haphazard manner. [Dewey (1915), pp. 15-16]

The practical question, of course, is: How? Dewey had some ideas about this, and a number of them should be retained. But it is also true that most of the educational reforms that have been seen in the United States in the twentieth century have been founded upon mere enthusiasm and based on divers propositions of ontology-centered pseudo-metaphysics that proponents find satisfying as matters of judgments of taste. These have little or nothing in them objectively valid for the direct object of all this enterprise – namely the learner. Mirel was correct to write,

John Dewey, long regarded as the "father" of progressive education, focused on this problem in his classic 1902 essay, "The Child and the Curriculum." . . . Dewey was emphatic that pupils *should* learn discipline-based contents, but he urged educators to recognize that, for the most part, such content was structured around questions and research that were meaningful to experts in various academic disciplines, not to children. . . . Dewey was arguing for discipline-based curricula to be reframed in ways that connected "with what the child has already seen and felt and loved." . . . Sadly, this is not what happened. Over the next century, Dewey was badly misunderstood. [Mirel (2011)]

I'm not convinced Dewey was as badly misunderstood as Mirel says, but this is a minor point because Dewey himself did not adequately understand the human nature of our social atoms and held some objectively invalid ontology-centered presuppositions not uncommon in psychology in his day. Even so, Dewey was not all that far off from deducing proper Critical educational propositions. I would agree if Mirel had said he was "badly misapplied." Much of what Dewey advocated can be described as *methodology for helping a learner move from a limited capability to Self-develop only by acting as a pupil to a general capability to Self-develop by acting as a student*. Today's institutional education in the U.S. is failing to accomplish even that to more than a mediocre degree. This is a topic we will take up later. Before doing so we must establish with more detail and clarity what public institution of instructional education is minimally obligated to accomplish under the terms of a social contract.

§ 2. Functional Dimensions of Public Instructional Education

There are two basic functional dimensions that mathematically define the social objective of public instructional education. Both follow as consequences of the prime objective of a Society's system of education: protection of the Society's *Existenz* and continuation as this is afforded by the protection of its citizens' civil rights. As I discussed earlier, a Society's system of education is primarily part of its justice system and its establishment necessarily presupposes that the Society formulates itself as a civil Community under the convention of a social contract. The principle governing public instructional education follows from the general principle of public education, *viz.*, all institutions of government in a Society's citizens.

Public education is that part of the systematic institution of education that serves interests common to all the members of the Community. The most difficult challenge facing the design of systematic institution of public education is the challenge presented by the *Existenz* of mini-Communities within the Community-as-a-whole. It is a basic principle of engineering that any correct design of any system must meet and satisfy *all* the objectives of the object of the design. Furthermore, it must withstand the stresses to which it will be subjected in its usages and not fail to properly function when it is subjected to these stresses. As the greatest stressor any social institution will face is the stress of competing special interests among mini-Communities, it

seems prudent to begin a deduction of the objective of public instructional education with this.

Every civil Community comes into being when free individuals jointly agree to combine the powers of their persons under a social compact of some sort such that their allegiance to and cooperation with one another betters the personal situations of every member. This is not altruism. *People form civil Communities for the purposes of Order and Progress in fulfilling their Duties-to-themselves*. **Order** is an Object subsisting in the preservation of the degree of all kinds and amounts of objective good people deem to already actually exist and which they possess or enjoy. **Progress** is an Object subsisting in augmentation of the kinds and amounts of objective good people to realize (make actual).

An objective good is any object that can be used as a wealth-asset. **Unwealth** is lack of what is practically needed to attain a state of satisfaction. A **wealth-asset** is any object the use of which negates unwealth. People tend to habitually think of objective goods and wealth-assets in terms of such economic goods as tangible property, but a wealth-asset can also be an intangible good that satisfies the individual through subjective affect alone. The companionship of friends is one example among many of such an intangible objective good. Wealth-in-general as a social-natural Object is that-which-is not-unwealth, and social-natural economics-in-general is the production, distribution and consumption of assets of wealth-in-general. People form civil Communities to protect their individual wealth-assets (Order) and to perfect their own tranquility by realizing an augmentation or improvement of these assets (Progress).

It is of course possible for a particular individual to realize personal Order and Progress by means of uncivic competition. Here there is no civil Community involved but, rather, interactions in which the individuals involved each seek to satisfy a Duty-to-himself in regard to his own situation without regard or concern for the situations of others. The relationship between individuals so mutually engaged is the *outlaw relationship* because between them there is no social compact in effect. If between two individuals there is a social compact in place and the actions of one of these individuals *deliberately* violates the terms of this compact, his action is a *crime* and the individual perpetrating the action is a *criminal*. If his action *unintentionally* violates the social compact it is an *outlaw action* and the perpetrator is said to have committed a deontological *moral fault*. Moral faults and crimes are both deontological moral transgressions, but the consequences for civil Community are quite different. In both cases the Community must seek justice – the negating of an injustice in these cases – but the nature of civil freedom of action in the manner in which justice is upheld are socio-contractually different in the two cases. In state-of-nature, i.e. outlaw, relationships there is no social contract to be violated and competition is deontologically *amoral*.

Were each person "an island unto himself alone" and capable of satisfying all his own needs and fulfilling all his Duties-to-himself without the occasional assistance of others, mankind would have never conceived the civil Community. But we do not find our situations to be so, and the effort to harmonize personal freedom with civil liberty of action poses the great problem that all Societies must endeavor to solve. It is the root social challenge at the core of Sandburg's verse,

You may call spirits from the vasty deep, Aye, you may – but will they come When you call them? You may sell an idea to the people And sit back satisfied you have them your way But will they stay sold on the idea? Will they be easy to hold in line Unless the idea has a promise of roots Twisted deep in the heart of man Being brought into play As though justice between man and man May yet breeze across the world with sea-smells And a very old, a very plain homemade cry, "Why didn't we think of this before?" – Sandburg (1936), 71, pp. 185-186

The human factor working at the root of all social dynamics is the satisficing nature of the process of human judgmentation. Any realistic plan for social organization that could be capable of sustaining the on-going real *Existenz* of a Society must account for satisficing character in the choices people make. For the problem of sustainable civil Community the first consideration must be how to deal with the challenges of mini-Communities, because Societies in breakdown break down first at mini-Community boundaries. Closely related to the sorts of satisficing choices individuals make are the educational effects the actions of social institutions have on individuals. These effects strike most prominently at individual judgments of justice, and by so doing contribute to creation or annihilation of social bonding and annihilation or creation of social antibonding between individuals and mini-Communities and between divers mini-Communities.

Mill wrote of two opposing satisficing inclinations found in judgmentation of social interactions: (i) the inclination of one person to exercise power over another in such a way that the exerciser utilizes the other person as an economic asset for his own *Personfähigkeit* of Relation; and (ii) the inclination of a person to resist the efforts of another person to exercise power over him. The first is Self-serving, the second Self-defensive. When our consideration shifts from a focus upon individuals to what we might call the communal or "mob" psychology of the corporate persons of mini-Communities, both inclinations are more easily-satisficing choices because the "other" they regard becomes stereotyped as abstract rather than real people. Mini-Communities tend to lose the self-restraint exhibited in those individual judgments of taste we traditionally describe using the word "empathy."

Yet the two inclinations Mill names are contrary rather than contradictory inclinations because they can be harmonized with each other through social contracts. We call the harmonizing factors *civil rights* accompanying *civil liberties*. There is and can never be a deontologically just claim to a civil right for which the holder of that right is under no balancing Obligation of civil liability to uphold those of the other persons in his Community. In a pure state of nature no one has any civil rights whatsoever. Nonetheless, even in the state of nature Mill's two opposing inclinations can be reconciled by accidents of judgment of taste or personal tenets of prudence. Herein also exists the possibility that either inclination can be strengthened by practical tenets of Duty-to-Self (in the person's manifold of rules) in regard to one's situation or by tenets of Duty-to-Self in regard to one's personality. Stereotyping makes Mill's satisficing inclinations easier to choose to effect, not because stereotyping *de*personalizes others as individuals but because it *personalizes* a deadmatter Object put in the place of those individuals. This is what is deontologically meant when one hears the phrase "he treats people as objects."

Examples of the effect and its consequences, both actual and literary, are abundant. A familiar one was staged by Shakespeare in *The Merchant of Venice* and personified in the character of that play's villainous moneylender, Shylock. Shakespeare's play presents the state-of-nature attitude of European anti-Semitism so casually there is little room to doubt that Shakespeare himself took this uncivil state entirely for granted – an unreflecting attitude modern social psychology calls institutionalized prejudice. Shylock, who was presented as a thoroughly unsympathetic character, nonetheless ought to be scientifically regarded through the normalizing social lens of actions *quid pro quo*. Let us look at the most famous of Shylock's speeches in the play:

[If] it will feed nothing else, it will feed my revenge. He hath disgraced me, and hindered me half a million; laughed at my losses, mocked at my gains, scorned my nation, thwarted my bargains, cooled my friends, heated mine enemies; and what's his reason? I am a Jew.

Hath not a Jew eyes? hath not a Jew hands, organs, dimensions, senses, affections, passions? fed with the same food, hurt with the same weapons, warmed and cooled by the same winter and summer, as a Christian is? If you prick us, do we not bleed? if you tickle us do we not laugh? if you poison us, do we not die? and if you wrong us, shall we not revenge? If we are like you in the rest, we will resemble you in that. [Shakespeare (1596-97), Act III, Sc. I.]

Shylock was attempting to effect the death of the merchant Antonio by employing the legal system of Venice as a weapon. No doubt Shakespeare's audience thought he got what was coming to him in the end, but I see in Shakespeare's play a state of nature between two Venice mini-Communities – the Christian merchants and the Jewish population of Venice – and neither justice nor injustice is meted out or received by anyone in the play. Antonio is presented as a nobly sympathetic victim – notwithstanding his alluded-to prior actions that provoked Shylock to act out of a practical Duty-to-himself with regard to personality (revenge is always an action that is grounded in such a practical hypothetical imperative in the manifold of rules) – but his friends, the play's protagonists, are a fine lot: participating in the insults and indignities heaped upon the moneylender casually throughout the play, conspiring to see him robbed of money, valuable property, and the society of his own daughter against the customs of his mini-Community, and celebrating his utter ruin. The entire cast of The Merchant of Venice is comprised of predators living in uncivil Community according to nothing but tenets of prudence. There is not a hero to be found among them. Shylock's downfall was due to bad judgment: if you're going to use the legal system as a deadly weapon, you'd be wise to get yourself an expert assassin to wield it -a skilled attorney. Shylock's power of persuasion proved inadequate for his purpose and his intellectual power inadequate specifically in his failure to foresee counterarguments decisively used against him in court by the cunning and deceitful Portia. Her own most famous soliloguy is an irony:

The quality of mercy is not strain'd, It droppeth as the gentle rain from heaven Upon the place beneath; it is twice blest; It blesseth him that gives and him that takes; 'Tis mightiest in the mightiest: it becomes The throned monarch better than his crown . . . It is an attribute of God himself; And earthly power doth then show likest God's When mercy seasons justice. Therefore, Jew, Though justice be thy plea, consider this, That, in the course of justice, none of us Should see salvation [*ibid.*, Act IV, Sc. I].

Logically we are led to suppose that in this speech Portia was offering Shylock the barest tendrils of a minimal social compact and, at the same time, warning him that if he refused it *she* was going to show *him* no mercy. Shylock failed to comprehend that in Portia he faced not an arbiter but an enemy. He missed her warning that things were about to turn on him disastrously, he spurned Portia's offer, and she then utterly ruined him. His life was spared only so that: (1) half his tangible possessions could be confiscated and given to his newly-Christian daughter and her Christian husband (with the other half being confiscated by the state); and (2) Shylock himself could be deprived of the liberty to remain a Jew and be forced to become a Christian. His only choice was to accede to these demands or be put to death, his property confiscated and given half to the state and half to his hated enemy, Antonio. Rarely has "the quality of mercy" been so blatantly used as a bargaining chip in literature. In history Portia's equals were the Mongols with their submit-or-be-destroyed military policy. As for justice, there is no deontologically valid concept of justice to be found anywhere in *The Merchant of Venice*. All parties involved were interested only in what was legal, not with what was just or unjust.

Tenets of Duties-to-Self, like all practical tenets, are learned products of experience. This is one key point upon which rests the social expedience of the institution of public education. As Rousseau wrote, the social contract "has for its end the preservation of the contracting parties." Civil institution of public education must begin with this as a formulating principle of design. The practice of ignórance is an easy and quick tactic for achieving a temporary equilibrium, but this type- α compensation behavior produces neither stable nor robust equilibria. It can and sometimes does generate threats to the *Existenz* of a Society. Shakespeare's play is fiction. If it was history instead, what happened to Shylock in the end could only fuel anti-bonding between the Christian and Jewish castes of Venice. Even as fiction I doubt if *The Merchant of Venice* is likely to ever be popular at any Shakespeare festival that might be held in modern day Israel unless it be restaged with Shylock presented as an Arab and Antonio *et al.* as Jews.

The foundation in Self-preservation is likewise the deontological foundation of justice in Mill's treatise *On Liberty*. There he wrote,

The object of this essay is to assert one very simple principle, as entitled to govern absolutely the dealings of society with the individual in the way of compulsion and control. whether the means used be physical force in the form of legal penalties, or the moral coercion of public opinion. That principle is, that the sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of any of their number is self-protection. That the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant. He cannot rightfully be compelled to do or forbear because it will be better for him to do so, because it will make him happier, because, in the opinions of others, to do so would be wise or even right. These are good reasons for remonstrating with him, or reasoning with him, or persuading him, or entreating him, but not for compelling him, or visiting him with any evil, in case he do otherwise. To justify that, the conduct from which it is desired to deter him must be calculated to produce evil to someone else. The only part of the conduct of anyone, for which he is amenable to society, is that which concerns others. In the part which merely concerns himself, his independence is, of right, absolute. Over himself, over his own body and mind, the individual is sovereign. [Mill (1859), pg. 8]

Even within this context of principle, Mill did recognize that children pose a special challenge. It has to be said, though, that Mill applied little or no reflection to the magnitude of issues involved in relationships of Society-to-children. He conceded *en passant* that

It is, perhaps, hardly necessary to say that this doctrine is meant to apply only to human beings in the maturity of their faculties. We are not speaking of children, or of young persons below the age which the law may fix as that of manhood or womanhood. Those who are still in a state to require being taken care of by others must be protected against their own actions as well as against external injury. [*ibid.*]

To what extent is this true? Mill fails to grapple with the obvious question here, namely: When is a Society warranted to regard a person as being not-of-mature-faculty or being "in a state to require being taken care of by others"? Age-of-maturity is a legal convention that is rarely settled by considerations of justice. Mill eventually strays from arguments that have deontological moral validity, but because he was a consequentialist in ethics – specifically, a utilitarian – it is not surprising that eventually his moral thesis passes beyond the horizon of real objectivity. The other side of the coin in all issues concerning hindrances of liberty is the issue of deontological justice in deciding when a person is qualified to pledge himself to citizenship, i.e., is capable of pledging acceptance of civil liability (*obligatione*) *in full cognizance* of the nature of this pledge. To properly consider this aspect of the challenge we must reflect upon a key question.

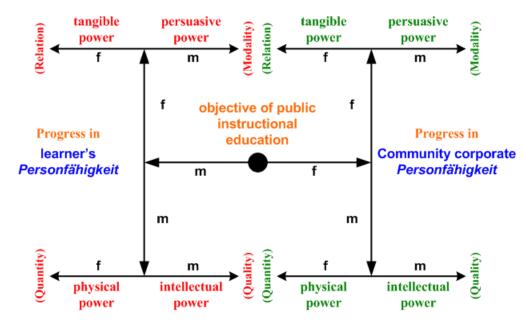


Figure 5.1: The 3LAR structure of the objective of public instructional education. The functionals of Progress in the learner's *Personfähigkeit* are depicted in red; those of the Community's corporate *Personfähigkeit* are depicted in green.

This key question is: What specific causal factors and educational Self-development (ESD) events underpin Order and Progress in a Society and, additionally, what causal factors and ESD events underpin the lack or absence of the same? Principles of educational practices and their institutions must recognize these if they are to have practical objective validity for benefiting a Society. A Society institutes a system of education so that each citizen's *Personfähigkeit* can be perfected by means of perfecting the corporate *Personfähigkeit* of the civil Community.

The servicing of these conjoint purposes underpins two dimensions of the social objective of public instructional education. The combination of individual *Personfähigkeit* and corporate *Personfähigkeit* produces a 3LAR structure for the idea of the objective of public instructional education. Figure 5.1 illustrates this structure. We obtain all specific empirical objectives for the institution of public education by examination of the eight mathematical functionals in this structure.

I have previously discussed corporate *Personfähigkeit* in chapter 2 (§5). Its four functionals are governed by animating principles. Specifically, these animating principles are:

- Principle of the persuasive power of the corporate person corporate persuasive power is measured by the degree of generation/annihilation activity in bonding and anti-bonding leadership events in the embedding field network representation of the corporate person;
- Principle of tangible power of the corporate person the group actions and adaptations taking place in the individuals' social interactions optimize social-economic utility for the group and each of its members;
- **Principle of intellectual power of the corporate person** growth and sustainability of the mini-Community of the corporate person requires some institution of a means for the civic education of every member of the mini-Community;
- **Principle of physical power of the corporate person** each person in the mini-Community must accept and attend to specific civic Duties, for the performance of which he can justly be held accountable by the Community-as-a-corporate-person.

To apply these principles to public instructional education (PIE) requires us to subsume an idea of Progress under these principles to obtain functional principles of form in PIE.

The learner's *Personfähigkeit* refers to the power of a person for the individual human being. These four functionals were developed in *The Idea of the Social Contract* [Wells (2012)] and are:

- **Persuasive power** the power of a person which subsists in his ability to sufficiently communicate his thoughts and ideas to other persons and thereby gain their consent, agreement or cooperation;
- **Tangible power** the power of a person which subsists in his stock of tangible personal goods, fungible skills, and his stock-of-time available to him for using them;
- Intellectual power the power of a person which subsists in his knowledge, intelligence and judgment;
- **Physical power** the power of a person which subsists in the capacities of his body.

To obtain the functionals of matter in figure 5.1 we must subsume an idea of Progress under the ideas of these four powers.

The general social idea of Progress is that of an Object subsisting in augmentation of the kinds and amounts of objective good people deem to be possible to realize. When we subsume this idea under the eight headings depicted in figure 5.1 it becomes apparent at once that the task of PIE is future-directed. By this I mean that the objective of public instructional education is realized, and hence the success achieved by the institution of PIE is to be judged, according to the eventual consequences the actions of instructional activity have for both the Society as a whole and for the particular individuals who are or become citizens in that Society's civil Community. Furthermore, the eight 3LAR headings also tell us the context of the specific improvements that public instructional education seeks to achieve.

The setting of these objectives, if it is to be made according to social-natural principles as a science, cannot be left to the whims of individual judgments of taste or the enthusiasms of popular opinion. The institution of public instructional education requires every member of the civil Community to contribute something to this educational Enterprise. If the institution itself is not to be a source of faction and civil malcontent the understanding and consent of each member must be secured. Furthermore, this consent must be secured with the firm understanding by each member that support of the institution is a civic Duty to which he must pledge himself. Thus, the problem of the institution of public educational instruction is a social-natural problem and can be solved with objective validity only if it is securely grounded in an applied metaphysic that links the empirical practice of PIE to the nature of being-a-human-being. Establishing this applied metaphysic will take an appreciable amount of labor to accomplish. We will take up the detailed task in the next chapter. First, however, we must obtain some further distinctness in the general context of the educational task and the general logical form of public instructional education.

§ 3. Metaphysical Considerations for Contexts of Public Instructional Education

The Critical deduction of an applied metaphysic – which must be a primary objective of this treatise – belongs to the doctrine of method in Critical epistemology. The deduction itself is an exercise in the application of Kant's system of transcendental Logic for a systematic real understanding of the topical phenomena relevant to an empirical science. Achieving an objectively valid understanding of the objective of public instructional education means obtaining objectively valid understanding of the contexts in which the activities of this Enterprise take place. When we turn to the specific tasks this involves in the next chapter, we will be carrying out precisely this sort of practice in transcendental Logic.

Unfortunately, neither the Critical doctrine of method nor the epistemologically correct usage

of transcendental Logic has been adequately understood throughout most of the history of the Critical Philosophy, nor is it true that most Kant scholars in the course of the two centuries that have elapsed since Kant's death properly understood Kant's system. Kant himself is partly to blame for this, but the degree of blame we can fairly lay upon him should be tempered by an appreciation of the magnitude of the task he undertook. Before the scientific development of details in Critical methodology and transcendental Logic could even be undertaken, it was necessary to obtain the Critical system of which they are merely one part.

Kant began with nothing and had perforce to develop, all by himself, the Critical system. This took him his entire lifetime to accomplish, and so to blame him for not also handing us all the methodological details would be rather like impugning Isaac Newton for not explaining nuclear physics. The degree of blame that can justly be laid upon Kant's shoulders is that he could have – and many say should have – provided more guidance to future metaphysicians than he did. As it was, later philosophers tended to jump too quickly to conclusions based on satisficing judgments of taste, missed the fundamental significance of Kant's Copernican turn in metaphysics – i.e., that metaphysics *must* be epistemology-centered and *never* ontology-centered – and tried to interpret Kant's theory in terms of traditional and ontology-centered concepts they had already been trained to use. The Copernican revolution rendered these old understandings no longer valid.

There is, I contend, not much that is censorious in this outcome. That even learned people would behave this way is a rather trivial prediction of mental physics, although Kant almost certainly would not have been cognizant of this when he was writing up and lecturing on the fundamental principles and concepts of the Critical Philosophy. The result, however, was, as one Kant scholar has put it, as fine a mess as one could ask for.

One can be a bit more censorious of the way logicians have treated – even to this day – Kant's system of transcendental Logic because Kant at least provided a brief – if you want to say 'overlybrief' I will not contest the assessment – *contextual* description of the purpose and aim of transcendental Logic. He did this in *Critique of Pure Reason*. There we find,

General logic abstracts . . . from all content of cognition, i.e. from any reference of it to the Object, and considers only the logical form in the relationship of cognitions to one another, i.e., the form of thinking in general. But now since there are pure as well as empirical intuitions . . . a distinction between pure and empirical thinking of objects could also well be found. In this case there would be a logic given in which one did not abstract from all content of cognition; for that one which contained merely the rules of the pure thinking of the object would exclude all those cognitions that were of empirical content. It would therefore concern the source of our knowledge of objects so far as that cannot be ascribed to the objects; while general logic, on the contrary, has nothing to do with this source of knowledge, but rather considers representations – whether they are originally given *a priori* in ourselves or only empirically, merely in regard to the laws according to which understanding brings them into relationship to one another when it thinks – and therefore it deals only with the form of understanding which can be provided to the representations wherever they may have originated. [Kant (1787), B:79-80]

Transcendental Logic contains both types, i.e. the "general logic that abstracts from all content of cognition" and the pure logic-of-thinking that is concerned with the laws of the human capacity for empirical knowledge and its possibility. Unfortunately for the subsequent history of the science, what Kant gives us here is a practical explanation of the aim of the system of transcendental Logic and not how the system is to be structured to achieve this aim. He never did return to a complete metaphysical treatment of the latter – to do so would require an entire treatise in its own right – and his only subsequent logic-related publications after *Critique of Pure Reason* came as lectures and manuals intended for his undergraduate students. It is little wonder that most modern logicians have assumed that Kant's transcendental Logic *had* to be nothing

more than a re-dressing of the Scholastic logic of his day – which in turn is misleadingly called 'Aristotelian logic' despite the fact that the Scholastics ignored the metaphysics of Aristotle's "science of inference"; to call Scholastic logic 'Aristotelian' is to confuse the re-upholstery covering Aristotle's system with its structural matter. But this presupposition of modern logicians should not be fully excused because Kant *did* explicitly tell us transcendental Logic is much more than what the Scholastics had achieved with their merely mathematical development.

A more serious omission by Kant was his leaving empty the treatment of Critical doctrine of method. He did – again very briefly – discuss the necessity of doctrine of method in *Critique of Pure Reason* but never produced any organized treatise devoted to this key topic. It is little wonder that the omission was not noticed by later Kant scholars. In 1993 there was a breakthrough development in understanding the Critical system. It came from Kant scholar Stephen Palmquist in his 1993 treatise *Kant's System of Perspectives*. Stephen's great contribution was the recognition and identification of a systematic *structure* that envelops the whole of Kant's metaphysics. Stephen's discovery was the key to the subsequent development of mental physics.

A Critical doctrine of method for deducing an applied metaphysic was only recently worked out [Wells (2011a), (2011b)]. It is this doctrine that is followed in this treatise for the deduction of the contexts and concepts of the institution of public instructional education. Development of an applied metaphysic is a step-wise process that proceeds in a specific order and which iterates until the correctness of the metaphysic for the application at hand is sufficiently established. Palmquist was the first to recognize the method Kant was employing in his development of the Critical system, and to lay out Kant's methodology in diagrammatic form. Figure 5.2 below illustrates this process. It begins in experience, the sole legitimate source of the subject-matter of a metaphysic of natural science. This means it begins with the collection and identification of specific facts of experience that the science is to systematically unify. This can be called the historical element of the science because at this step the facts being dealt with can properly be called a natural history but not yet a natural science. They are not yet unified by laws but merely by their placement in a common category based on the purpose of the science-to-be.

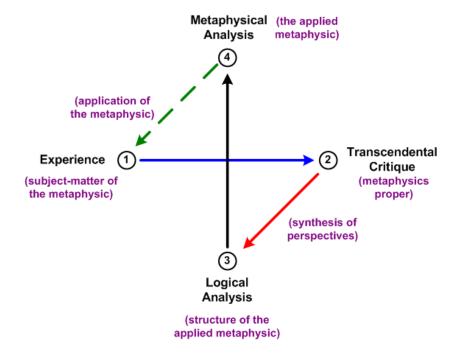


Figure 5.2: Palmquist's 12CR diagram of the development of a metaphysic.

The second step involves transcendental Critique, a phrase that means *epistemological* analysis of the collected facts. Now, of what, precisely, does such an analysis consist? The first context of this question is immediately clear as soon as we recognize that the entire endeavor is directed to making a natural science possible. In our present case, the institution of public instructional education is expected to result in the achievement of some specific accomplishments – the above-stated objectives – and therefore we are dealing with the genesis of a natural science of a *practice*. We might call it a *natural science-craft* to crisply distinguish its purpose from those of other types of natural sciences. In this context, engineering and the practice of medicine are likewise natural science-crafts.

To thoroughly understand and appreciate, though, that a science-craft is no less a science than physics, chemistry, or any other traditionally recognized science, it is important to firmly grasp the meaning of the word "science." Here Kant tells us,

If one wishes to present knowledge as a *science*, then one must first be able to determine precisely the discriminatives it has in common with no other [science], and which is therefore its *distinguishing feature*; otherwise the boundaries of all sciences run together, and none of them can be dealt with thoroughly according to its own nature.

Whether this distinguishing feature consists in a difference of the *Object* or the *source of knowledge*, or even the *type of knowledge*, or several if not all of these things together, the Idea of the possible science and its territory rests first of all upon it. [Kant (1783) 4: 265]

Any science practices an organized presentation of knowledge. The practices of a science aim at a specific unifying purpose. For a science-craft this specific purpose subsists *in* how-to-practice, and we must be careful to recognize that there is a distinction between this *system of practical art* and specific practices as *actions* by which objective knowledge topically belonging to the science is investigated, understood, and presented. For the topic of this treatise, the practice of the science-craft is *the art of educating*. For the science-craft of engineering, the practice of the science-craft is the art of solving technical problems. For the science-craft of medicine, the practice of the science-craft is the art of treatment of diseases and injuries.

Where does epistemology and metaphysics enter into all this? That question is easy to answer. They enter through the condition that the science be a *natural* science. What does this mean? Kant answered this when he wrote,

We will therefore have to do here only with experience and with the general and *a priori* specified conditions of its possibility, and from there we will determine nature as the whole object of all possible experience. I think I will be understood: that here I do not mean the rules for the *observation* of a nature that is already given . . . but, rather, how the conditions *a priori* of the possibility of experience are at the same time the sources out of which all general natural laws must be deduced. [*ibid.* 4: 297]

This is the essence of Kant's Copernican turn in metaphysics. The "general and *a priori* specified conditions of" the possibility of experience is contained in Critical metaphysics proper, and an applied metaphysic brings the acroams of metaphysics proper to bear on specific natural contexts. This all harkens back to what is necessary for the very idea of "nature" to be objectively valid:

Nature is the *Dasein* of things insofar as that is determined according to general laws. If nature meant the *Dasein* of things *in themselves* we could never know it, either *a priori* or *a posteriori*.... The word nature takes yet another meaning, namely to determine the *Object*, whereas in the above signification it only alludes to the *conformity to law* of determination of the *Dasein* of things in general. Nature looked upon materially is the *embodiment of all objects of experience*. We have to do here only with this, since otherwise things that could

never be objects of an experience, if they had to be known according to their nature, would force us to concepts whose signification could never be given *in concreto* (in any example of a possible experience), and we would accordingly have to make for ourselves unalloyed concepts of the nature of them, the reality of which – i.e., whether they actually relate to objects or are mere things of thought – could not be decided at all. Knowledge of what cannot be an object of experience would be hyperphysical, and with things like that we have nothing to do here – but, rather, with that knowledge of nature the reality of which can be corroborated through experience – even though [a hyperphysical concept] equally is possible *a priori* and precedes all experience¹. [*ibid.* 4: 294-296]

The third step is a logical analysis of the structure of the applied metaphysic. This logical analysis is an exercise in transcendental Logic and involves the synthesis of basic perspectives of epistemology, namely: (1) a logical reflective perspective carried out according to acroams of Rational Physics; (2) a transcendental reflective perspective carried out according to acroams of Rational Psychology; (3) a hypothetical reflective perspective carried out according to acroams of Rational Cosmology (the metaphysics proper of Nature); and (4) an empirical reflective perspective carried out according to acroams of empirical Reality; Rational Theology has nothing whatsoever to do with religion; the term itself is a hangover from 18th century Wolffian rationalism).

Whereas the third step establishes the logical *form* of the metaphysic, the fourth step fills in this form by means of a metaphysical analysis, by which the Objects of the special science are grounded in fundamental acroams of Critical epistemology. The primary aim of this step is to establish the conditions of real objective validity for the ideas and Objects of the special science. Following the fourth step, the metaphysic is then tried against the collection of empirical facts in order to determine if the applied metaphysic is adequate to address the topical interest of the science for which it is to be the applied metaphysic. This four-step process is continued until the adequacy of the applied metaphysic is firmly established and no holes in it are to be anywhere found. Every applied metaphysic engineer" because his task is to solve all the technical problems that attend the crucial task of grounding the objective validity of the special science in question.

Step 1 can properly be called the definitional step in this process because it is concerned with gathering, organizing, and clarifying the distinguishing features of our social-natural science of education. All the previous chapters in this treatise are, in divers ways, directed at accomplishing this step sufficiently to establish the boundaries and contexts of that science. We proceed to the next step when we subject the Object depicted in figure 5.1 to Critique in order to deduce the form for institution of public instructional education that is congruent with the requirements of a social contract generally. Kant noted,

The *advance* in a knowledge as science in general (*Progreβus*²) captures from discovery of its elements of knowledge, and after that how the manner of orderly arrangement must be (systematically), so as to connect these such that the division of this business into a doctrine of elements and a doctrine of method constitutes the supreme division; the former presents the concepts, the latter their structure, in order to make a whole of science.

The passage (transition) from one form of knowledge to another must be a step only, not a leap; that is, the doctrine of method requires one to pass . . . from concepts of nature givable *a priori* to empirical ones which yield empirical knowledge. [Kant (c. 1796-7), 21: 386-387]

¹ In Critical terminology, the phrase *a priori* only means "prior to actual experience" and does *not* mean innate or 'pre-programmed' objective knowledge of the sort the philosophers of rationalism championed. ² from the Latin *progressus*, an advance towards a more perfect or finished state.

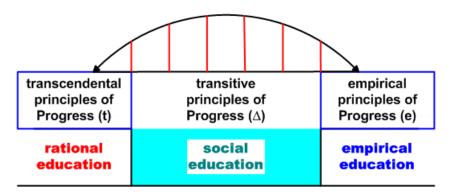


Figure 5.3: Bridge model of an applied metaphysic of public instructional education (PIE). There are three general synthetic categories of education pertaining to PIE: rational education according to transcendental principles of Progress; empirical education according to empirical principles of Progress; and social education according to transitive (spanning) principles of Progress. These major synthetic categories serve as portable concepts of education science in passing from concepts of the nature of education givable *a priori* to empirical concepts discovered through experience. Labels t, e, and Δ denote these categories.

To "capture the manner of a systematic, orderly arrangement" for a scientifically constructed institution of public instructional education we begin with the doctrinal model figure 5.3 depicts. The aim of the institution is to achieve the objective of Progress in a Society's corporate *Person-fähigkeit* for the benefit of all the members of its civil Community. This is only accomplished by means of achieving Progress in the individual *Personfähigkeit* of each learner because the power of a Society can be no greater than the synergy of allied personal powers of its members.

Synergy in a group of people – the phenomenon where the power of the group is greater than the mere sum of the individual powers of its members – is a real social phenomenon achievable by successful leadership dynamics. I have personally witnessed this phenomenon many times in industrial, academic, and athletic settings. Instructors of management methods find it difficult to explain the phenomenon rationally – which not infrequently leaves some fraction of their students in doubt about the actual *Dasein* of the phenomenon – but mental physics does not find it the least mysterious. It is the result of interpersonal transactions among individuals that stimulate, turn by turn, the actions of individuals' creative imaginations through the synthesis of the aesthetic Idea [Wells (2009) chap. 7, §3.2.2, pp. 260-264]. Kant called it an animation of mind. Figure 5.4 illustrates the 2LAR structure of the aesthetic Idea.

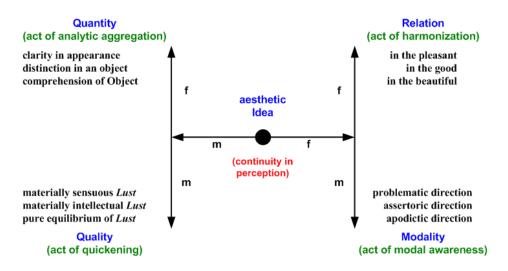


Figure 5.4: 2LAR structure of the aesthetic Idea.

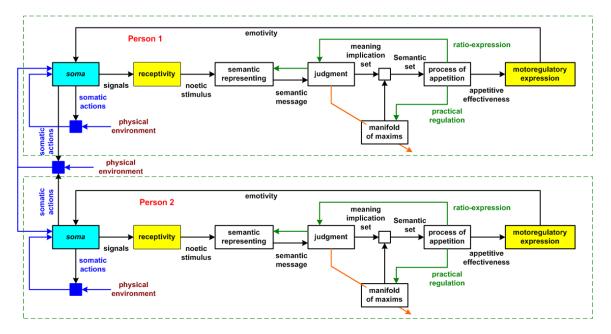


Figure 5.5: Weaver's model of two-person interaction.

One can grasp the human nature of the possibility of synergy qualitatively from Weaver's model of two-person interactions (figure 5.5). Impact messages communicated by the expressions of Person 1 stimulate semantic representing, judgmentation and appetition in Person 2 who, in his turn and by means of his own communicative expressions, stimulates these in Person 1. When these co-stimulations constructively harmonize, synergy in ideation and action results³. This is an intensely creative process adjudicated solely by the processes of aesthetical reflective judgment in the individuals involved. For this reason, the process itself is inherently autistic, and this is why teachers of management methods untrained in mental physics are unable to explain how it works to their students in clear and objective terms.

Progress and even sustainable Order in corporate *Personfähigkeit* requires as a minimum that social interactions not produce anti-synergy in the body politic of the Society. The kinds of social interactions productive of synergy (and antagonistic to anti-synergy) all involve learned maxims of social behavior. For this reason, one of the three general synthetic categories for educational Self-development belonging to properly instituted public instructional education is *social education*. This is the spanning function between the rational and empirical factors in education science (figure 5.3). We will see presently that matter-and-form division of this category gives us two poles of social education: *civics* education and *civil* education.

The process of practical Reason is the master regulator of all non-autonomic human behavior. It effects this regulation function by means of an empirically constructed manifold of practical rules that the person learns (Self-develops) from experience. These practical rules are themselves never objects of objective thinking but, rather, control the determination of practical appetitions (choices). Reason is a cognitively dark and affectively cold process of mind. It serves *one* master law, Reason's categorical imperative mandating that the person always act to achieve an actual state of equilibrium in his *Existenz* – a condition called Critical happiness in Kantian terminology.

³ It is also possible for these co-stimulations to be unharmonious, i.e. to produce destructively competitive or uncooperative action expressions by the individuals. In this case, the total power of the group is less than the arithmetic sum of their individual powers. I call this phenomenon *anti-synergy* and have witnessed it many times as well. It is symptomatic of incompetent leaders' actions in the leadership dynamic.

But because pure practical human Reason knows no objects and feels no feelings⁴, the only manner by which it can control motoregulatory expression of actions is as a negative control – what neuropsychologists Obhi and Haggard (2004) have colorfully called "free won't." Positive expressions of motoregulatory actions are adjudicated by the process of reflective judgment – an affective and non-objective process – and Reason exerts its control over these impetuous expressions by means of a veto power. In brief, if a previous expression of an impetuous motoregulatory action resulted in an unsatisfactory experience (i.e. the outcome was antagonistic to the establishment of equilibrium), the process of practical judgment establishes an empirical practical rule in the manifold of rules such that future repetitions of that action are forbidden by pure practical Reason. Findings reported by Obhi and Haggard (2004), Libet *et al.* (1983), and others accord with one of Kant's conclusions he stated two centuries earlier:

What is essential in every determination of will by [the categorical imperative] is that, as a free will . . . it is determined solely by law. So far, then, the effect of [the categorical imperative] as mainspring⁵ is only negative, and as such this mainspring can be known *a priori*. For all inclination and every sensuous impulse is based on feeling, and the negative effect on feeling (by infringement of the inclination that takes place) is itself feeling. Hence we can see *a priori* that [the categorical imperative], as ground of determination of will, must by thwarting all our inclinations effect a feeling that can be called pain, and here we have the first and perhaps the only case in which we can determine *a priori* from concepts the relationship of a [practical rule] (here it is one of pure practical Reason) to the feeling of *Lust* or *Unlust*. [Kant (1788) 5: 72-73]

A few words of explanation are in order here regarding the translation just given. In what is perhaps the greatest irony in Kant's remarkable career, he committed one outstanding blunder: in the development of his moral theory he slipped back into *ontology*-centered thinking⁶ and confounded the epistemologically sound idea of the categorical imperative of pure practical Reason with a specious notion he called *the* moral law. It was an error that plagued his ethical theory and doomed his attempt to put Rousseau's social contract theory on a sound metaphysical footing. This is something I discussed at length in Wells (2012). In the quote above *I* have substituted the phrase "the categorical imperative" wherever Kant wrote "the moral law." The latter phrase is without objectively valid grounding in Critical metaphysics proper, whereas the phrase I have substituted for it *is* so grounded.

Despite the speciousness of Kant's presupposition that there is some one "the" moral law innate in the *homo noumenal* aspect of being-a-human-being, Kant was not altogether wrong in intuiting that there is some sort of relationship between the structure of the manifold of practical rules in pure practical Reason and the cultural phenomena of moral customs (*Sittlichkeit*). The highest practical rule-tenets in the manifold of rules – the practical hypothetical imperatives that condition all lower rules – cannot be gainsaid by a person when they are provoked by a *parástase* of reflective judgment. Stimulate the provocation of a practical hypothetical imperative in a person's manifold of rules, and *he will act* according to that rule.

⁴ This character of pure Reason can be likened to a degree to Freud's idea of the superego.

⁵ *Triebfeder*. This is one of Kant's more colorful technical terms. It essentially means "something that makes us go." The word comes out of a metaphor Kant seems to have liked. In German the *Triebfeder* of a clock is its mainspring, and Kant likened the factors that animate mental activity to a clock's mainspring.

⁶ All of us develop very strong habits of ontology-centered thinking for the simple reason that ontologycentered thinking *works* for a child, and these habits-of-thinking subsequently orient and shape the development of higher maxims of reasoning as we grow up. The single most difficult challenge in studying the Critical Philosophy is learning how to break your own ontology-centered habits of thinking and make a habit out of epistemology-centered thinking. Until and unless you do, you have *no* chance of understanding Kant's system or the theory of mental physics.

The practical consequence of this fundamental property of pure Reason is that practical hypothetical imperatives and the higher practical tenets standing immediately under them in the manifold of rules carry all the force we normally tend to associate with moral laws – even though the action itself might be anything but "moral" in the judgment of other people. There are some men who, quite predictably, will immediately respond to a personal insult by giving you a punch in the mouth. Some people will condemn that action, others will condone or even endorse it. It all depends on what structures *they* have constructed in their own manifolds of rules. It is not the practical rule itself that engages the action; it is the regulation and orientation of judgmentation produced through ratio-expression by the provocation of the rule that results in the action. This outcome of ratio-expression is so irresistibly forceful that for all practical purposes it merits the name *practical Duty to oneself*. Learning to control your own temper is an experiential learning exercise in accommodating the structure of your manifold of rules by developing alternative tenets of response when a particular hypothetical imperative of pure practical Reason is provoked. People who exhibit what psychiatrists call an antisocial personality disorder are people who have never made such an accommodation in their manifolds of rules.

The bottom line for all of this is simply this: In many ways the effect of the manifold of rules on a person's behavior for all practical purposes can be called *the person's private moral code*. Each and every one of us develops, through our personal experiences, such a private practical code. The fact that we differ from one another in the details of how these codes are manifested is due to nothing more than differences in our experiences and, in some cases, to physical differences in *soma* (due to biological accidents of physical development, injuries, etc.). The fact that the majority of people living in a common societal culture develop very similar private moral codes is due to homogeneities in their experiences and to the experience of being socialized by contact with the rest of the members of their Community. Man has no innate moral instinct. Each person, however, does have an innate *capacity to construct his own manifold of rules*, and it is the outcome of this experience-driven construction process - regulated by the categorical imperative of pure practical Reason – that leads to the phenomena of mores and folkways in a Society. We are, each one of us, the persons we have made ourselves become. If you don't like yourself, don't blame God, the fates, the devil, the French, your third grade teacher, or the villainous boss you had when you were sixteen; blame yourself. You, and you alone, have the power to make and remake yourself. You alone choose when, if, and how to exercise that power over your Self.

Having said this, I must now add: It is the nature of human judgmentation that accommodation of the individual's manifold of rules is *always* to some degree, great or small, a traumatic event. This is because people do not change this manifold unless judgmentation and ratio-expression fail to find a satisficing solution to whatever situation has produced the disturbance to equilibrium triggering ratio-expression by practical Reason. The most prominent character of practical Reason is *impatience*. It regulates for equilibrium in the quickest manner the person can find and neither practical judgment nor the categorical imperative "care" how this re-equilibration is achieved. Reason, again, is a cognitively dark and affectively cold mental process. Maintenance of Order in Society and even the sustainability of a civil Community crucially and fundamentally depends on the members of that Community developing practical maxims of cooperation with one another. This is the essence of all social contracting. It follows from this immediately that the civil Community has a common real interest in guiding and influencing the *practical* character of each individual's development of his manifold of rules. This Self-development is nothing else than a case of the outcome of the individual's divers educational Self-development events. Therefore, to service the objective of the institution of public instructional education, the transcendental principles of Progress call for *rational education*, i.e., the education of practical judgments, as an element in the institution of public instructional education.

The matter-and-form divisions of this category of education relate, on the one side, to the

person's satisfaction of Duties-to-himself in regard to his own personality and situation and, on the other side, to the Society's social contract requirement for satisfaction of reciprocal Duties-toothers (without which no real communal alliance can ever happen). This means the matter-andform division of rational education divides as *vocational education* (serving Duties-to-oneself) and *moral education* (serving the development of the habitual mores and folkways that promote cooperation and synergy in the Society). Vocational education serves Progress in the learner's *Personfähigkeit* by extending what he can accomplish for his own benefit⁷, and this is to say it serves Progress in *civil liberty*. Moral education serves Progress in the corporate *Personfähigkeit* of the civil Community through perfection of civil cooperations in accord with *civil rights*.

Lastly we have the category of **empirical education**. A scientific implementation of public instructional education must be so designed and instituted as to address that which is empirical in actual achievements of social Progress in civil Society. The educational category of empirical education does not refer to specific curricula or teaching methodology, important as both of these are. It refers to the *principles of structure* for a scientific institution of education designed to satisfy the social objective. One does not achieve a scientific implementation of education by copying methods and forms that have been developed specifically to serve the purposes of some other special science, e.g., its professional standards of statistical analysis, common practices of data reduction, or general practices of experiment design. *As* science, education is not physics, chemistry, biology, or any other special science. It is (or, more accurately, it is to be made into) a special science in its own right with its own objects, methods, and practices.

But these objects, methods and practices must be grounded in the specific purposes to be served by a science of education. *That* discrimination is what determines what we earlier saw Kant call the distinguishing feature of a science – the thing that is special about it and sets it apart from other special sciences. In the case of public instructional education, this distinguishing feature can only consist in the *Object* of this science, namely, to serve Progress in the civil Society in which it is an institution of Society. Empirical education has to do with the logical function of education in regard to social Progress. Again we have two types of objective phenomena to consider: the learner as individual person and the corporate person of the civil Community to which he is or is to become a citizen member. Accordingly, empirical education is also subject to a two-fold matter and form division, the poles of which we shall see are properly called *justice* education and *enterprise* education.

§ 4. The Logical Functions of the Categories of Public Instructional Education in General

Any systematic institution of public instructional education is, like every institution of social government, a designed entity and it is merely a question of how well it is designed. Something Mill said about political institutions generally applies to it specifically:

Let us remember, then, in the first place, that political institutions (however the proposition may be at times ignored) are the work of men: owe their origin and their whole existence to human will. Men did not wake on a summer morning and find them sprung up. . . . In every stage of their existence they are made what they are by voluntary human agency. Like all things . . . which are made by men, they may be either well or ill made, judgment and skill may have been exercised in their production or the reverse of these. [Mill (1861) pg. 3]

⁷ the word vocation derives from the Latin verb *vocare*, the practical root meaning of which is to call for, require, or demand. A person's satisfaction of his Duties-to-himself is the highest practical calling of the power of appetition in human Self-determination to action. All mutual Obligation and cognitive maxims of Duties to others develop out of this when the person learns that by committing to Obligations of a social contract with others he at the same time serves Duties-to-himself. No institution of public instructional education that ignores this basic character of *H. sapiens* can succeed in meeting its prime objective.

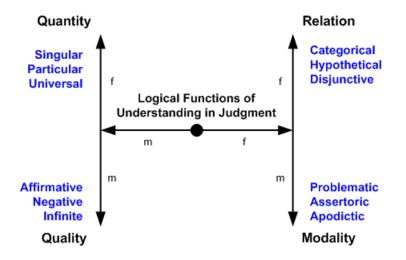


Figure 5.6: The logical functions of understanding in judgment of objective determinations.

Speaking as an engineer, I must judge that historically designs of institutions of education – private and public – have been ill made and, however much judgment did go into them, have been carried out with little design skill. Whether we're speaking of ancient Mesopotamia or the well-meant enthusiasms of twentieth century America, institutions of education have always more or less been tried as copies of other existing social institutions, as if either the institution of education is a subaltern of that other institution or a convenient temporary substitute for it. Most, although not all, seem to have been patterned on whatever community of family was most common in the Society at the time. But an institution of education is no more a substitute for or a subaltern of a family than is a daycare center. Institution of public instructional education has no connection to institution of family whatsoever. It is a political function – because every institution established to serve the general purposes of a Community is a political function – and it is established to serve the fulfillment of a Community purpose.

The three general categories of public instructional education – rational education, empirical education, and social education – are logical functions of a social purpose. Curriculum and other such things fill in the material functions. The proper design of the institution must proceed according to general logical functions of understanding in judgment as this judgment is applied to the *objective* determination of the institution. Put another way, each of the categories of education is understood according to the logical functions it serves, which in turn sets the proper placement of the educational category within the architectonic of the system as regards educational form.

In Kantian Logic there are twelve logical *momenta* for functions of judgment, three each under the general headings of Quantity, Quality, Relation and Modality. Figure 5.6 illustrates the 2LAR structure of these logical functions [Wells (2009), chap. 6]. The Critical real-explanations for these logic terms are provided in the technical glossary at the end of this treatise. I think it would take us too far afield from the topical subject to digress into a lesson on logic, and so any reader who wishes to understand these details I refer to Wells (2009). Here I will limit myself to merely noting: that Kant's logical functions are not Aristotle's; that they refer to *understanding*, not mere mathematical logic (the forms of which can be deduced *from* them); and that those of you who have been enriched by some previous college course in logic are probably well advised to remember what you thought these terms might mean at the *beginning* of your course rather than how you understood them at the *end* of your course. These *momenta* are functions of *thinking*, not the contentless sterile forms that Scholastic logicians were and modern logicians are so proud of⁸.

⁸ I remember how dissatisfied I was in my youth with what I was taught in "logic." I expected more from it.

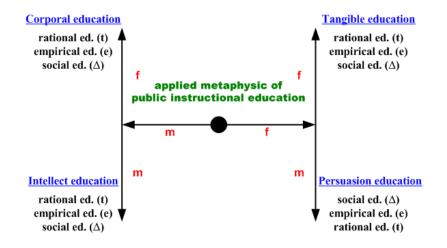


Figure 5.7: The logical structure of the applied metaphysic of public instructional education.

Any applied metaphysic makes use of what have been termed *portable concepts* from Critical metaphysics proper and synthesizes its specialized ideas by combining these portable concepts with *specifying concepts* that serve to set the context of the metaphysic [Wells (2011a)]. So it is for the present endeavor. Now, the portable concepts we obtain from figure 5.6 are always taken in groups of four, one each from the four headings in that 2LAR. The three general categories of public instructional education are specifications we obtain by subsuming these under specifying concepts. In the present case, these specifying concepts come from the context of *Personfähigkeit* and a transcendental Critique yields the 2LAR structure figure 5.7 illustrates. The portable concepts themselves are named in this figure by the 2LAR headings – corporal education for Quantity, intellect education for Quality, tangible education for Relation, and persuasion education for Modality. Compare these with the 2LAR headings of *Personfähigkeit* and you should be able to see the connection in context. The specification tells us the *place* of each of the education general categories within the applied metaphysic.

The category of rational education in its logical function is {singular, affirmative, categorical, apodictic}. It is singular in Quantity because the object of its activities is always a singular entity, either the individual learner or the corporate person of the Community to which he belongs. It is affirmative in Quality because it places specifications on the contexts of instruction, *viz.* specifications pertaining to the types of benefits to be gained by the civil Community from its provision of the public institution: corporal; intellectual; tangible; or persuasive. It is categorical in Relation because the contexts of the educational Self-developments sought deal with the civil objective as subject for the activity and with the accidents of action inherent in this subject. It is apodictic in Modality because education of practical judgment aims at ensuring the Society operates under a common kernel of mores and folkways, i.e., it pertains to *public ethics*. Each person builds his own individual and private moral code in his manifold of rules, but a Society requires a *general* code *that every member will accept*. Such a code can only be deontological and such that each citizen *will* hold-it-to-be a universal and necessary system of moral imperatives.

The general category of empirical education in its logical function is {particular, negative, hypothetical, assertoric}. It is particular in Quantity because no one topical object of instruction is wholly contained in the scope of interest of either a specific individual or a mini-Community within the civil Community as a whole⁹. To put it another way, public instructional education only partially serves any specific *special* interest. If it solely served just one specific special

⁹ In a proposition of a particular judgment the sphere of the subject concept is only partially contained in the sphere of the predicate.

interest, it would be *private* rather than *public* instructional education. Rather, public instructional education aims to serve *communal* interests empirically interrelating individuals and divers mini-Communities. It is negative in Quality because Progress in *Personfähigkeit*, both for individuals and for the corporate person of the Community, absolutely demands the prohibition of uncivic and uncivil exercises of liberties of free action. One teaches civil liberty and civil rights by teaching what exercises of liberty are contradictory to them though possible in the state of nature. It is hypothetical in Relation because of the aim of public instructional education to teach that the fulfillment of the social contract of the civil Community is the grounding *end* antecedent to and conditioning the *means* by which individuals and mini-Communities may exercise liberty of action. It is assertoric in Modality because the empirical bridgehead of the applied metaphysic pertains to the *design* of the institution. Now, every design is purposive, i.e., aimed assertorically at achieving the objectives set under the purpose of that which is designed.

The general category of social education in its logical function is {universal, infinite, disjunctive, problematic}. It is universal in Quantity because the subject of the purpose of public instructional education institution is entirely contained within the predications of civil Society. To understand the logical function of Quality in its case requires a little explaining of what is meant by the term "infinite judgment" in Critical Logic (because this momentum of judgment is not found in traditional logics). An "in-finite" judgment places the subject concept in the sphere of some *undesignated* third concept *outside* the sphere of the predicate concept. An example of such a predication is "Fred is not-a-beagle." Whatever Fred-as-Fred might really be, the property of being-a-beagle is irrelevant to the real-explanation of being-Fred. Perhaps Fred might possibly be a person who habitually wears a mournful expression "like a beagle's." That doesn't make Fred a beagle. Calling a tail a leg because it is leg-shaped doesn't make a tail a leg.

An infinite judgment limits *the sphere of the predicate* rather than the sphere of the subject. A negative judgment, on the other hand, has a form such as "is-not y" in the copula and explicitly limits the *subject* concept rather than the *application* of the predicate concept. There is a great difference between something that is unspecified (not-specified) and something that is negatively specified, i.e., for example, specified as "is-not forbidden." Under the legal code of the state of Idaho it is-not forbidden for you to kill me if you do so in defense of your own life or if I am a condemned criminal and you are a public executioner. On the other hand, it is not-forbidden in Idaho for a supermarket to sell you a quack medicine advertised as a cure for your obesity problem¹⁰. The somewhat cynical commercial precept *caveat emptor* ("let the buyer beware") acknowledges this fact. Social education does not teach the learner what *is* civic or civil in his liberty of action because to try to do so must *ipso facto* forbid social innovation, a key element of Progress. Rather, its aim to teach what *is not-uncivic* or *is not-uncivil* in the exercise of his personal liberty. This is possible because it pertains to teaching the meanings of established terms and conditions *of the civil Community's social contract*. Citizens *must-not-be* uncivic or uncivil.

Social education is disjunctive in Relation because disjunctive judgments all pertain to the codetermination of multiple sub-propositions that stand under a general proposition. For example, every specification of a civil liberty co-involves specifications of civil rights. You are at civil *liberty* to dye your hair blue or shave it all off if you so choose, but I have the civil *right* of not being required to do the same even if every other resident of Latah county should elect to do so. Disjunctive Relations in Society are those co-involving the citizens-*of*-a-civil-Community and the citizen-*in*-civil-Community. Rousseau was taking a stab at this idea when he wrote,

Those who are associated in [civil Community] take collectively the name of *people*, and severally are called *citizens*, as sharing in the sovereign power, and *subjects*, as being under the laws of the State. But these terms are often confused and taken for one another: it is

¹⁰ In some ways the infinite proposition is the bane of grammar school English teachers.

enough to know how to distinguish them when they are being used with precision. [Rousseau (1762), pp. 14-15]

It is rather a great pity Rousseau himself did not know how to so-distinguish them with precision.

Social education is problematic in Modality because social education aims at promoting synergy and hindering anti-synergy in the social dynamics of the Society. Synergy/anti-synergy, however, subsist in interpersonal interactions among people. These are *always* subject to the individuals' semantic representing of what each perceives to be communicated by others (figure 5.5). Semantics pertains to meaning implications and these belong to the reflective judgment of taste, which for each person is entirely subjective. Social education is in this sense the education of social taste, and this can only be problematic. However, individuals *develop* their preferences of taste, and this development can be oriented and guided by public instructional education. Recall that acquisition of taste is part of the basic definition of education.

For example, let us ask: Is uncivic state-of-nature free market capitalism¹¹ congruent with what one would likely presume the social contract of the confederate republic of the United States, as envisioned by the ratifiers of the U.S. Constitution, was to be regarded? Remember: the framers carried out their work before the Industrial Revolution came to America's shores. Under the currently accepted legal tenets of free enterprise folkways in the United States, it is held to be entirely proper that you and I might strike a bargain whereby in exchange for me painting your house you will allow me to comb through your garbage can and take as my payment whatever scraps of food I might find in it. We are both at civil liberty to strike such a bargain. A legal economic exchange takes place. Both of us benefit: you from having your house painted and me from not starving to death. Now ask yourself this: How kindly do you think I might be disposed to look upon my American citizenship as a personal benefit under such a condition in my social circumstances? How likely do you think it might be that I would be more inclined to develop tastes for moral secession from our Society and for outlawism, and hence decide to better my situation by stealing your wife's jewelry, selling it to a fence, and eating at a diner instead?

That there were some seamier aspects of social change when the Industrial Revolution came to America's shores is indisputable, just as it is indisputable that there were a great many benefits as well. (Washing machines and clothes dryers come to mind). Historians Adams and Vannest wrote of the antebellum North in the first half of the nineteenth century,

There is little freedom in the New England mills. The Northern workman might be "free" politically and legally, but economically he was far from being free. In New England mills in the 1830's the hours of work ranged from twelve to fifteen. The manager at one mill in Holyoke found that his operatives could produce 3000 more yards of cloth a week if he worked them without breakfast. In Patterson, New Jersey, the women and children were worked from 4:30 in the morning. Rhode Island mills were working children under twelve from ten to fourteen hours a day, six days a week, one of the managers proudly saying that he allowed them to go to school on Sundays. Their wages were a dollar and a half a week. Another Massachusetts owner stated that he considered his workers precisely as he did his machines. When either got old or out of order, he threw them out. Employees who made trouble were blacklisted and often could get no work elsewhere unless they carried a card of approval from the last mill in which they had worked. Under those conditions "freedom" was not freedom at all. [Adams & Vannest (1935), pp. 658-659]

¹¹ There is nothing contained in the basic idea of free market capitalism that says it must be civic and civil instead of being uncivic and state-of-nature in its character (or vice versa). Darwinian capitalism is always of the latter kind. In contrast, small *Gemeinschaft* Communities in the U.S. (so-called small town America) carry out free market capitalism under almost entirely civic and civil folkways. And local merchants welcome the arrival of Walmart in their towns about the way a herd of antelopes welcomes a pride of lions.

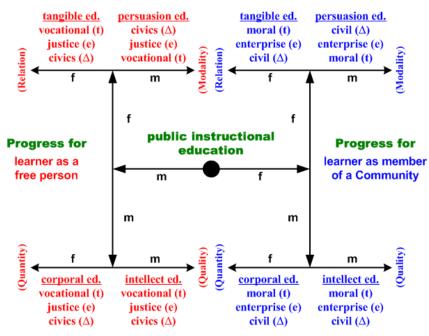


Figure 5.8: The 3LAR structure of public instructional education.

I'd be willing to stake a small wager that such conditions were not at all what any of the framers were envisioning in 1787, least of all the delegates from Massachusetts or New Jersey¹².

The Modality function of social education pertains to acclimating people to behaviors that promote *coherence in civil Society* insofar as that Society is established by a civil Community under a common social contract. It is *not* the role of social education to engineer social change (because a civil Society will usually place that responsibility elsewhere in government; public education primarily belongs to the *justice* function of government, not the legislative or executive), but educating the public on current or developing incongruence within the dynamics of the Society – those which threaten Order or Progress – *is* a proper role for the institution of public instructional social education. The 1960s provides *partially* successful examples of this in the United States. It also provides even more examples of glaring failures and miscarriages of it.

§ 5. Progress-Oriented Public Instructional Education

As general categories rational education, empirical education and social education pertain to the public instructional education task in its more general character. It is still necessary to develop a further level of distinctions connecting the institution of public instructional education directly to the objective of public instructional education (figure 5.1). Figure 5.8 illustrates this 3LAR structure and the final task for this chapter is to explain the deduction of this structure. The six functionals obtained by this deduction constitute *special Classifications of public instructional educational education*. The deduction is made using disjunctive inferences of Reason.

The general interest of a civil Community in the institution of public instructional education is always grounded in securing Order for its Society. The Community might or might not hold a generally favorable attitude towards Progress in Society, but maintenance of Order is always in the general interest (or else the Community has already disintegrated, in which case it is no longer a civil Community and public institutions of all sorts are a moot point). This sort of attitude is often found in many small *Gemeinschaft* towns in the United States.

¹² Rhode Island did not send a delegation to the Constitutional Convention.

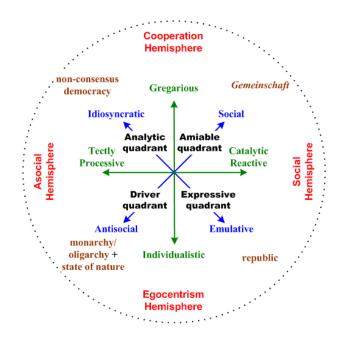


Figure 5.9: Circumplex model of the commonly encountered forms of communal governance and the interpersonal habitual social styles that find them the most attractive or suitable.

However idyllic and attractive one might view the idea of life in a *Gemeinschaft* Community, one key fact cannot be neglected. As I discussed in *The Idea of the Social Contract*, above a small population level, *Gemeinschaft* Community is unstable.¹³ There are two principal reasons for this. First, *Gemeinschaft* communal governance is attractive to only one of the four general types of human interpersonal habits of social style (figure 5.9), specifically the Amiable social style. As the population level increases, people with the other types of personality style habits come to make up the majority of the membership in the Community, and for these styles the *Gemeinschaft* form of communal governance is distasteful to their personalities, producing tension and uncivil competition responses.

Second, even in the case of *Gemeinschaft* townships, the local Community is usually a mini-Community within a much larger Community. Unless it has isolated itself from contact with and influence by that larger Community, innovation brought forward elsewhere generally stirs within the mini-Community a widespread desire for local Progress. This factor, introduced into the mini-Community by outside example and influence, is antagonistic to the sustainability of *Gemeinschaft* governance because the desire for change is not uniformly shared by all members of the Community. As a consequence factions form within the mini-Community. *Gemeinschaft* governance, with its *laissez faire* character, is unable to successfully deal with the subsequent social issues faction produces. It is not uncommon for the Amiable subpopulation to fare somewhat badly during the social revolution that usually follows. One example in recent times is provided by the case of the immigration of ranchers into forested regions of the Amazon that had previously been inhabited by *Gemeinschaft* rubber tree tappers and indigenous Indians. In this case social change has been accompanied by widespread violence and bloodshed. A second example is provided by a case study of change in a Mexican village reported in the 1970s by Maccoby. He tells us,

¹³ The theory of relationships between personality, social styles and forms of governance is lengthy. Because this topic has already been treated in Wells (2012), I refer those who wish to examine it in depth to that work.

Historically, the jungle fighter¹⁴ has been an entrepreneur and empire builder. In the Mexican village we studied, Fromm and I found that a small group of bold and innovative jungle fighters was the first to break away from the traditional practices; these villagers were the first to buy tractors, which they also rented out to others, the first to try out new farming methods with chemical fertilizers, and were the most likely to become middlemen.

Some of the most successful also operated by means of force, blackmail, and bribes to gain wealth and political influence. The sadistic attitude symbolically expressed in their Rorschach records of predatory animals, blood, and stone idols was behaviorally acted out in their ruthless suppression of opponents and castrating domination of subordinates by their own force or aided by *pistoleros*¹⁵.

In the "developing" village society, such jungle-fighter entrepreneurs were the new men and were known as the "progressives." They were the ones who opposed traditional fiestas as a waste of money and a temptation to drunkenness. They argued that the money would be better spent for new roads useful for their agribusinesses, and for schools, which gave their children a chance to prepare for university careers. When the small landowners or artisan-craftsmen spoke for traditional ways, the entrepreneurs accused them of opposing progress. Their wealth, new values of material accumulation, and modern methods deepened class divisions in the village and destroyed traditional limits and protections against envy. Eventually, the entrepreneurs succeeded in dominating the village economically, politically, culturally, and ideologically. Yet, despite their material success, the jungle fighters seemed to enjoy life less than others in the village. They distrusted the people they controlled and feared revenge from those whose land they had gobbled up. They had no comrades, only accomplices and servants. They did not like the fiestas, and were uninterested in the welfare of the poor, condemning the landless day laborers they exploited as lazy and stupid. Most of these men had destructive effects on their wives, children, and others in the village. [Maccoby (1976), pp. 73-74]

All civil Communities that institute a system of public education, whether this is instructional education or otherwise, do so with recognition (either tacit or explicit) of two social dimensions involving the learner (figure 5.10). This is so in the case of the BaMbuti pygmies with their playground institution of education just as much as it is true for modern Western and Far Eastern Societies. The matter dimension – the learner as a free person – recognizes that all educational Self-development occurs at the will of the learner himself in his individual exercise of his natural liberty. The form dimension – the learner as member-of-a-civil-Community – recognizes that the Community's support for public education is grounded in the common interest of preserving the social Order and continued *Existenz* of their Society. Historically there are many ways that have been employed for this, ranging from those of hunter-gatherer Societies to trade or churchcentered institutions of education in smaller Communities to large state government institutions.

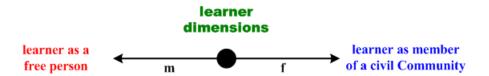


Figure 5.10: 1LAR structure of the two principal learner dimensions. The matter dimension, the learner as a free person, recognizes that all educational Self-development has for its sole transcendental source the appetitions and Self-determinations of the learner himself in his natural liberty of action. The form dimension, the learner as member-of-a-civil-Community, recognizes that the support of the Community for the institution of education is grounded in preservation of the civil Society for its Community.

 ¹⁴ "jungle fighter" is Maccoby's term for the Driver social style in figure 5.9. Maccoby dislikes Drivers.
¹⁵ gunmen

Order-only oriented institutions of public education are adequate only for small Communities or for mini-Communities within a larger social entity. Such institutions are largely *Gemeinschaft* and, as just noted, are unstable or unsustainable in larger civil Communities. It is for that reason that Progress-orientation in the design of institutions of public instructional education is key to the achievement of the prime objective of a Society's institution of a *system* of education. This prime objective, once again, is protection of the Society's *Existenz* and its continuation as this is afforded by the protection of its citizens' civil rights. Education in Maccoby's Mexican village is one example among many of a case where Order-only oriented education proved insufficient for the protection of this *Gemeinschaft* Society's civil rights and, as a consequence, when the social revolution occurred there, it was characterized by enormities and the disintegration of the original Community into factions of caste. The *Gemeinschaft* governance of the village fell to the antisocial form of governance by oligarchy with an accompanying state-of-nature division taking place between the castes. The Mexican village is no longer a single civil Community; its Society fell and, as noted in the previous chapter, it fell from within and in a brief amount of time.

Progress is unsustainable without Order, and therefore Progress-oriented public education is an enlargement of educational scope that must necessarily sustain social Order. Even if a civil Community has little or no general interest in the achievement of Progress, education dealing with the problems of Progress is essential even to the mere maintenance of Order. This is because the social phenomena of Order and Progress are not distinct and separate from each other. They merge in the social atoms of the Community itself. Mill wrote,

[It] is impossible to point out any contrivance in politics, or arrangement of social affairs, which conduces to Order only, or to Progress only; whatever tends to either promotes both. Take, for instance, the common institution of a police. Order is the object which seems most immediately interested in the efficiency of this part of the social organization. Yet if it is effectual to promote Order, that is, if it represses crime and enables everyone to feel his person and property secure, can any state of things be more conducive to Progress? The greater security of property is one of the main conditions and causes of greater production, which is Progress in its most familiar and vulgarest aspect. The better repression of crime represses the dispositions which tend to crime, and this is Progress in a somewhat higher sense. The release of the individual from the cares and anxieties of a state of imperfect protection sets his faculties free to be employed in any new effort for improving his own state and that of others; while the same cause, by attaching him to social existence, and making him no longer see present or prospective enemies in his fellow creatures, fosters all those feelings of kindness and fellowship towards others, and interest in the general wellbeing of the community, which are such important parts of social improvement. . . .

In support of the position that Order is intrinsically different from Progress, and that preservation of existing and acquisition of additional good are sufficiently distinct to afford the basis of a fundamental classification, we shall perhaps be reminded that Progress may be at the expense of Order; that while we are acquiring, or striving to acquire, good of one kind, we may be losing ground in respect to others; thus there may be progress in wealth while there is deterioration in virtue¹⁶. Granting this, what it proves is not that Progress is generically a different thing from Permanence, but that wealth is a different thing from virtue. Progress is Permanence and something more; and it is no answer to this to say that Progress in one thing does not imply Permanence in everything. No more does Progress in one thing imply Progress in everything. Progress of any kind includes Permanence in that same kind; whenever Permanence is sacrificed to some particular kind of Progress, other Progress is still more sacrificed to it; and if it be not worth the sacrifice, not the interest of Permanence alone has been disregarded, but the general interest of Progress has been

¹⁶ This is why Maccoby wrote "progressives" and "developing" in quotes in the earlier citation. He did not see what was happening in the village as a whole as either Progress or as a good development. And he was right in this general assessment.

mistaken.

If these improperly contrasted ideas are to be used at all in the attempt to give a first commencement of scientific precision to the notion of good government, it would be more philosophically correct to leave out of the definition the word Order, and to say that the best government is that which is most conducive to Progress. For Progress includes Order, but Order does not include Progress. Progress is a greater degree of that of which Order is a less. Order, in any sense, stands only for a part of the prerequisites of good government, not for its idea and essence. Order would find a more suitable place among the conditions of Progress; since, if we would increase our sum of good, nothing is more indispensable than to take due care of what we already have. If we are endeavoring after more riches, our very first rule should be not to squander uselessly our existing means. Order, thus considered, is not an additional end to be reconciled with Progress, but a part and means of Progress itself. If a gain in one thing is purchased by a more than equivalent loss in the same or in any other, there is not Progress. Conduciveness to Progress, thus understood, includes the whole excellence of a government. . . . What is suggested by the term Progress is the idea of moving onward, whereas the meaning of it here is quite as much the prevention of falling back. The very same social causes – the same beliefs, institutions, and practices – are as much required to prevent society from retrograding as to produce a further advance. [Mill (1861), pp. 14-16]

Mill is social-naturally correct in this analysis. It is for that reason that Progress, and not Order, is explicitly called out in the 3LAR structure of public instructional education.

§ 6. 3LAR Structure of a Metaphysic for Public Instructional Education Science

The 1LAR division shown in figure 5.10 is the starting point for specializations of the three general categories of public instructional education into the set of six Classifications of public instruction depicted in figure 5.8. Specialization of the categories is required because the Objects dealt with in the matter-and-form division of figure 5.10 differ from each other, and each requires a different context of understanding. This is because the nature of the learner as a free person is a different specific nature from that of the learner as member-of-a-civil-Community. The former acts in his individual capacities and in the service of Duties-to-himself. The latter acts in his corporate capacity, where the Duties that drive his actions are Duties of *social* Obligation, i.e., reciprocal Duties of one person to the situation of others.

Although the specifying concepts contextualizing each of the two poles in figure 5.10 differ, the unity of the learner requires homogeneity in the Critical Standpoint by which the basic 2LAR of figure 5.7 is viewed and understood. This homogeneity is *enforced* by one transcendental Idea of metaphysics proper serving as a portable concept and the *major acroam* of the metaphysic. The Standpoint provides the common basis of architectonic unity of the metaphysic. For an applied metaphysic of public instructional education, the correct Standpoint is the practical Standpoint of Critical metaphysics. This is more or less obvious because an institute – an embodiment, either whole or partial, of the institution – subsists in the actions taken by its agents. This fundamental connection to agent actions is why neither the theoretical nor judicial Standpoints are appropriate for the metaphysical task at hand, and why only the practical Standpoint fits the context in which the metaphysic is to be developed.

Turning now to the task of identifying the correct acroam to be applied, this determination is more or less straightforward. A social-natural science must deal with the nature of the social phenomenon that constitutes its Object of study. This nature, in turn, is determined by the type of special Object pertinent to the scientific purpose at hand. Kant deduced that there are four fundamental types of ontological objects and identified the transcendental Idea (the specific Critical acroam) that applies to each. Figure 5.11 illustrates this 2LAR structure of metaphysics.

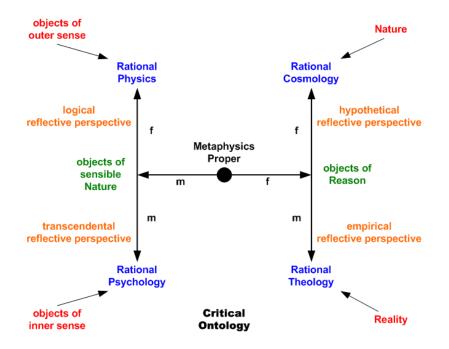


Figure 5.11: The 2LAR structure of Critical ontology in metaphysics proper.

The four basic metaphysical objects are: objects of outer sense; objects of inner sense; Nature; and Reality. The last two are objects of Reason, i.e., supersensible objects of reasoning by which human understanding comprehends *form* in one World as a whole embodiment of the individual objects that constitute its matter. Each ontological heading is governed by its specific acroam, which is none other than one of the transcendental Ideas of Critical metaphysics proper. The technical names given to these Ideas are shown in the figure and are:

- the Idea of Rational Physics (the physical Idea), which governs the logical reflective perspective applied to objects of outer sense;
- the Idea of Rational Psychology (the psychological Idea), which governs the transcendental reflective perspective applied to objects of inner sense;
- the Idea of Rational Cosmology (the cosmological Idea), which governs the hypothetical reflective perspective applied to the idea of Nature as object of Reason; and
- the Idea of Rational Theology (the theological Idea), which governs the empirical reflective perspective applied to the idea of Reality as object of Reason.

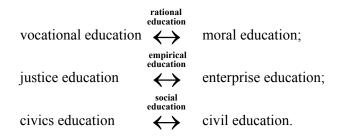
The Object pertinent to the special science to be grounded by the metaphysic might seem at first glance to be the learner. However, this is not the case. The learner is certainly an important object *for* the science, but he is not the special Object *of* the science. That Object is determined by the single idea establishing the principle of a disciplined whole of the knowledge the science is to explain. This principle is established by the *purpose* of the science, and for the case of a science of public instructional education this purpose is implied in the objective of public instructional education. The objective, of course, is Progress in *Personfähigkeit* in regard to both the learner's *Personfähigkeit* and the corporate *Personfähigkeit* of the Community.

An objective is not set to no purpose. A Society's general interest in institution of *public* instructional education can be none other than to benefit the Community whose corporate unity establishes the Society. The purpose of a social-natural *science* of public instructional education, therefore, is to seek out and understand what is essential in order for the educational institution to

serve, maintain and improve the Society of the Community.

The type of ontological object pertinent to this purpose follows from this. The concern of the science is to learn how to serve the organized topical entity of a corporate person. A corporate person is an organized being but it is not an Organized Being (not a social atom but a social molecule). A corporate person has no unitary phenomenon of mind and so the major acroam cannot be the Idea of Rational Psychology. Nor is it a physical object and so the major acroam cannot be the physical Idea. This leaves only consideration of the cosmological Idea and the theological Idea. Now, the purpose of a *science* of institution of public instructional education is not concerned with understanding the form of an *already given* Nature-of-education as an object of Reason. Quite to the contrary, it is concerned with the knowledge of how education can, will, or must affect the state of the human Society. Put another way, it is concerned with what is necessary for the possibility of an institution of public instructional education meeting the purpose for which the Society establishes it. This is matter of a *nexus*, i.e., a Modal object of Reason. Therefore, the major acroam of the applied metaphysic can be nothing other than the theological Idea regarded from the practical Standpoint. Put another way, the major acroam pertains to how to make a socially beneficial institution of public instructional education, congruent with a Community's social contract, a social Reality. It is an acroam of design.

As the Ideas applied to the general t, e, and Δ categories of the metaphysic (figure 5.3) are different, so too are the specific contexts of their Classifications in the learner dimensions (figure 5.8). We make, in other words, a disjunctive inference of Reason for each category according to contexts of its scope. I here anticipate the discussion carried out in chapter 6 by naming the disjunctive Classifications now. They are:



Each of these six Classifications of public educational instruction inherits its logical function from the parent category. Thus, both vocational education and moral education carry the t label in figure 5.8, justice education and enterprise education both carry the e label, and civics education and civil education both carry the Δ label. In this way the general architectonic of the institution of public instructional education as a scientific system is obtained. What remains yet to be done is to further elucidate the specific contexts of each of the six Classifications by providing their realexplanations, and to provide the distinctions attending each under the general headings of Quantity, Quality, Relation and Modality in both of the 2LAR halves of a 3LAR structure of public instructional education. For these tasks we proceed to chapter 6.

§ 7. References

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