Chapter 5   The Development of Moral Judgments

§ 1. Social Contracts and the Phenomenon of Moral Judgments

Why do questions concerning moral codes and moral judgment concern us in this treatise on the Idea of the Social Contract? It is wise to remind ourselves of our objective here at the beginning of this second chapter dealing with the topic of moral judgment. Our objective is to obtain a scientific understanding of the phenomena of social contracts. Why and how do considerations of morality enter into the scope of this objective?

Two groups of people having intercourse with each other can do so in either of two general modes. In regard to the specific type of intercourse, whatever it might be, these two modes are called a *state of nature* and a *civil state*. When the interacting groups have intercourse in a civil state, the two groups are said to *form an association* with each other. Any association of human beings requires as its first condition of *Dasein* some kind of social compact or understanding between the groups. This compact might take written form or it might subsist only in some unwritten and perhaps even unspoken mutual understanding. This pertains even if each group is comprised only of a single individual. Indeed, the notion that two or more *groups* are having intercourse with each another presupposes, as a condition of the idea of a group, that some kind of social compact is in place between individuals comprising a group. This is because any human group is itself an association of some kind.

But what has any of this to do with ideas of morality? Rousseau wrote,

> At once, in place of the individual personality of each contracting party, this act of association creates a moral and collective body composed of as many members as the assembly contains voters, and receiving from this act its unity, its common identity, its life, and its will. The public person, so formed by the union of all other persons, formerly took the name of *city*, and now takes that of *Republic* or *body politic* [Rousseau (1762), I. 6, pg. 14].

Rousseau wrote *The Social Contract* having political science in mind as his general topic. However, ideas of social compacts or contracts have much broader reach than merely political science and, indeed, extend to all forms of social intercourse that are not state-of-nature intercourse. A compact is an idea not limited to the idea of a city or even to ideas of governance, as Rousseau implies in calling the association a Republic. It is certainly not limited by the idea of people *voting*, other than perhaps in the metaphorical sense of "voting with one's feet" by choosing to enter into a civil association or to leave one and return to state-of-nature intercourse with others who remain within the association. It is not inappropriate to call the association a "body politic" in the context of the Greek idea of *politeía* (which, by the way, is the actual title of the Platonic dialogue that is traditionally but misleadingly translated into English as *Republic*; the proper translation for Plato's very unrepublican-like essay on how to structure and order the ideal city-state is *Body-Politic*). The metaphorical name "body politic" is a reasonable one that follows unforced as soon as one thinks of an association of people as a thing with common and public *corporate* interests distinct from those of people who are not members of the association. A trade union, a merchants' association, a band of Kalahari Bushmen, a commercial company, and a Tuesday night poker club are all examples of forms of bodies politic in the context of *politeía*.

But what in any of this justifies Rousseau's assertion that a body politic is a *moral* body? We get a glimpse of what he was thinking when he tells us,

> The passage from the state of nature to the civil state produces a very remarkable change in man, by substituting justice for instinct in his conduct, and giving his actions the

morality they had formerly lacked. Then only, when the voice of duty takes the place of physical impulses and right of appetite, does man, who so far had considered only himself, find that he is forced to act on different principles, and to consult his reason before listening to his inclinations. Although, in this state, he deprives himself of some advantages which he got from nature, he gains in return others so great, his faculties are so stimulated and developed, his ideas so extended, his feelings so ennobled, and his whole soul so uplifted, that, did not the abuses of this new condition often degrade him below that which he left, he would be bound to bless continually the happy moment which took him from [the state of nature] forever, and, instead of a stupid and unimaginative animal, made him an intelligent being and a man. [*ibid*., I. 8, pg. 19]

It doesn't take all that much study to soon see that Rousseau takes much for granted in what he has written. He was a romantic before the romanticism movement began in the Europe of his day and, like all romantics, he often tendered noble ideas that proved to have glaring practical issues troubling them. Even so, when one joins in an association with others and wishes for the *Existenz* of that association to be maintained, it is true that one finds he must act on principles that are utterly alien to living in a state of nature. This is what Rousseau means when he says entering into the civil state in one's social situations with others gives one's actions "the morality they had formerly lacked." In this Rousseau is-not incorrect because it is clear that he is using the word "moral" in its connotation of *mores*. You need not concern yourself about the welfare of your society if you are a member of *no* civil society and instead live your life in state of nature relationships with everyone else. You *must* concern yourself with it if you wish the association to survive for very long in the civil state because of the essential condition for the *Existenz* of *any* social compact, namely,

> The problem is to find a form of association which will defend and protect with the whole common force the person and goods of each associate, and in which each, while uniting himself with all, may still obey himself alone and remain as free as before. [*ibid*., I. 6, pg. 13]

If you do not do your part to contribute to "the whole common force" that "defends and protects the person and goods of each associate," then no one else will have any reason to defend and protect *you* against whatever undesirable effects are warded off by the act of association. If you like to play poker but are not a member of the mafia, how would you feel about sitting down each Tuesday night with a crew of five mafia thugs for a friendly night of poker?

Social compacts extend beyond political activities to the majority of non-political matters of social intercourse, e.g., simple barter and exchange. Let's say you have a sheep and I have a goat and we're going to meet to see if we can work out an exchange. Let's also suppose our relationship is a civil relationship. Then you expect me to not try to steal your sheep and I expect you to not try to steal my goat. You expect to go home with a goat but not with a sheep, while I expect to go home with a sheep but not with a goat. We both "contribute to a whole common force" if that happens because, clearly, we are both at *natural liberty* to show up armed to the teeth with intent to use our weapons. But neither of us is at *civil liberty* to do this. Suppose *you* show up armed but I do not. Clearly you then have an advantage you *could* use to try to take my goat without giving me a sheep, or to force me to exchange my prize goat for a sick and dying sheep. When you do *not* do this, you have "honored the social compact." Adam Smith wrote,

> In civilized society [man] stands at all times in need of the cooperation and assistance of great multitudes, while his whole life is scarce sufficient to gain the friendship of a few persons. In almost every other race of animals each individual, when it is grown to maturity, is entirely independent, and in its natural state has occasion for the assistance of no other living creature. But man has almost constant occasion for the help of his brethren,

and it is in vain for him to expect it from their benevolence only. He will be more likely to prevail if he can interest their self-love in his favor, and show them that it is for their own advantage to do for him what he requires of them. Whoever offers to another a bargain of any kind proposes to do this. Give me that which I want, and you shall have this which you want, is the meaning of every such offer; and it is in this manner that we obtain from one another the far greater part of those good offices which we stand in need of. It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages. [Smith (1776), I. ii, pg. 13]

To understand the idea of social compacts and contracts, then, it is necessary to understand the human Nature that underlies and grounds phenomena of mores and folkways. But to do this is nothing else than to understand the human Nature of the phenomenon of moral judgment.

§ 2. The Object of Morality

In studying the development of moral judgments what does one look for? We have already seen that moral judgments appear as judgments of "right-and-wrong" or "good-and-evil." What these are seem, by the time one reaches adulthood, obvious in the particular but frequently very obscure in the general. To say this another way, a person has no difficulty in making moral judgments in specific and concrete cases as these come to his attention. But ask people to define morals or morality in abstract and general terms and we at once find ourselves confronted with a panorama of different and conflicting views. Santayana wrote,

> In moral reprobation there is often a fanatical element; I mean that hatred which an animal may sometimes feel for other animals on account of their strange aspect, or because their habits put him to serious inconvenience, or because these habits, if he himself adopted them, might be vicious in him. Such aversion, however, is not a rational sentiment. No fault can be justly found with a creature merely for not resembling another, or for flourishing in a different physical or moral environment. . . .
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> Ethics, if it is to be a science and not a piece of arbitrary legislation, cannot pronounce it sinful in a serpent to be a serpent; it cannot even accuse a barbarian of loving a wrong life, except in so far as the barbarian is supposed capable of accusing himself of barbarism. If he is a perfect barbarian he will be inwardly, and therefore morally, justified. The notion of a barbarian will then be accepted by him as that of a true man, and will form the basis of whatever rational judgment or policy he attains. It may still seem dreadful to him to be a serpent, as to be a barbarian might seem dreadful to a man imbued with liberal interests. But the degree to which moral science, or the dialectic of will, can condemn any type of life depends on the amount of disruptive contradiction which, at any reflective moment, that life brings under the unity of apperception. The discordant impulses therein confronted will challenge and condemn one another; and the court of reason in which their quarrel is ventilated will have authority to pronounce between them. [Santayana (1906), pp. 233-234]

Every social compact is a moral compact of some sort, but of what sort? Is there, as Aristotle was accustomed to ask, some one essence to it or are there divers sorts? Is a specific moral principle, as Plato was accustomed to ask, on the way from or to the first principle? As soon as one has made himself familiar enough with several ethical theories, and not merely with one, it then is quite apparent that wherever the roots might have grown originally, the rationalized ethic has long forgotten its birth place. If we are to treat the topic as a science must, we must seek these roots. Santayana also said,

> When the idea which dialectic is to elaborate is a moral idea, a purpose touching

something in the concrete world, lemmas from experience often play a very large part in the process. Their multitude, with the small shifts in aspiration and esteem which they may suggest to the mind, often obscures the dialectical process altogether. . . . When morality is in this way non-dialectical, casual, impulsive, polyglot, it is what we may call pre-rational morality. There is indeed reason in it, since every deliberate precept expresses some reflection by which impulses have been compared and modified. But such chance reflection amounts to moral perception, not to moral science. . . .

Pre-rational morality is vigorous because it is sincere. Actual interests, rooted habits, appreciations the opposite of which is inconceivable and contrary to the current use of language, are embodied in special precepts; or they flare up of themselves in impassioned judgments. It is hardly too much to say, indeed, that pre-rational morality is morality proper. Rational ethics, in comparison, seems a kind of politics of wisdom, while post-rational systems are essentially religious. If we thus identify morality with pre-rational standards, we may agree also that morality is no science in itself, though it may become, with other matters, a subject for the science of anthropology [*ibid*., pp. 211-212]

That "morality is no science in itself" is an important point. We call a dialectical theory striving to be a science of morality by the name "ethics." As for the object of ethics, one can hardly do better in describing its appearances than Piaget did when he wrote,

Logic is the morality of thought just as morality is the logic of action. Nearly all contemporary theories agree in recognizing the existence of this parallelism . . . One may say, to begin with, that in a certain sense neither logical nor moral norms are innate in the individual mind. We can find, no doubt, even before language, all the elements of rationality and morality. Thus sensorimotor intelligence gives rise to operations of assimilation and construction, in which it is hard to see the functional equivalent of the logic of classes and of relations. Similarly the child's behavior towards persons shows signs from the first of those sympathetic tendencies and affective reactions in which one can easily see the raw material of all subsequent moral behavior. But an intelligent act can only be called logical and a good-hearted impulse moral from the moment that certain norms impress a given structure and rules of equilibrium upon this material. Logic is not co-extensive with intelligence, but consists of the sum-total of rules of control which intelligence makes use of for its own direction. Morality plays a similar part with regard to affective life. . . . The control characteristics of sensorimotor intelligence is of external origin: it is things themselves that constrain the organism to select which steps it will take; the initial intellectual activity does not actively seek for truth. Similarly, it is persons external to him who canalize the child's elementary feelings; those feelings do not tend to regulate themselves from within.

This does not mean that everything in the *a priori* view is to be rejected. Of course the *a priori* never manifests itself in the form of ready-made innate mechanisms. The *a priori* is the obligatory element, and the necessary connections only impose themselves little by little as evolution[1] proceeds. It is at the end of knowledge and not in its beginnings that the mind becomes conscious of the laws immanent to it. Yet to speak of directed evolution and asymptotic advance towards a necessary ideal is to recognize the existence of a something which acts from the first in the direction of this evolution. But under what form does this "something" present itself? Under the form of a structure that straightaway organizes the contents of consciousness? or under the form of a functional law of equilibrium, unconscious as yet because the mind has not yet achieved this equilibrium, and to be manifested only in and through the multitudinous structures that are to appear later? There seems to us to be no doubt about the answer. There is in the very functioning of sensori-motor operations a search for coherence and organization. Alongside, therefore, of the incoherence that characterizes the successive steps taken by elementary intelligence we

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[1] i.e., the evolution of understanding, judgment and intelligence in the individual person.

must admit the existence of an ideal equilibrium, indefinable as structure but implied in the functioning that is at work. Such is the *a priori*: it is neither a principle from which concrete actions can be deduced nor a structure of which the mind can become conscious of as such, but it is a sum-total of functional relations implying the distinction between the existing states of disequilibrium and an ideal equilibrium yet to be realized. [Piaget (1932), pp. 398-399]

There is probably nothing more peculiar in human nature than this: that despite the manifold diversity of individual experiences and the highly individualistic practical moral codes people build for themselves in their manifold of rules, people growing up and living together in the same community come to largely share an encompassing commonality of mores and folkways and a more or less normalized common standard of ethical behavior. We call this phenomenon by the name *socialization*. Yet this phenomenon is, for itself and in its basics, an outcome of experience. Santayana wrote,

To one brought up in a sophisticated society, or in particular under an ethical religion, morality seems at first an external command, a chilling and arbitrary set of requirements and prohibitions which the young heart, if it trusted itself, would not reckon at a penny's worth. Yet while this rebellion is brewing in the secret conclave of the passions, the passions themselves are prescribing a code. They are inventing gallantry and kindness and honor; they are discovering friendship and paternity. With maturity comes the recognition that the authorized precepts of morality were essentially not arbitrary; that they expressed the genuine aims and interests of a practiced will; that their alleged alien and supernatural basis . . . was but a mythical cover for their forgotten natural springs. Virtue is then seen to be admirably essential, and not merely by conventional imputation. If traditional morality has much that is unintelligent and inert, nevertheless it represents on the whole the verdict of reason. It speaks for a typical human will chastened by a typical human experience. [Santayana (1906), pg. 218]

In Critical epistemology morality (*Moralität*) is a system of practical laws standing under practical hypothetical imperatives that a human being constructs in his manifold of rules. These constituted laws are not themselves visible to our direct inspection nor can any human being report them to us because he is himself *objectively* unconscious of the *parástases* in his manifold of rules. Consequently, any *theory* concerning them can only be a mathematical theory and we must identify what in phenomenal appearances provide for its *objective* validity. This, however, we find not in philosophers' systems but in what Santayana called pre-rational morality. Piaget was correct when he wrote,

All morality consists in a system of rules, and the essence of all morality is to be sought for in the respect which the individual acquires for these rules. The reflective analysis of Kant, the sociology of Durkheim, or the individualistic psychology of Bovet all meet on this point. The doctrines begin to diverge only from the moment that it has to be explained how the mind comes to respect these rules. For our part, it will be in the domain of child psychology that we shall undertake the analysis of this "how." [Piaget (1932), pg. 13]

"The child is father of the man," wrote Wordsworth[2]. To understand the phenomenal Nature of human morality we must turn to study its development in the moral judgments of children.

§ 3. Childish *Moralität*

Piaget approached developmental child psychology as a naturalist. In his study of childish

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[2] William Wordsworth (1807), *My Heart Leaps Up*.

moral judgment he proposed no moral doctrine of his own but instead limited his studies to the observation of children's behaviors, interrogatories exploring the children's explanations of rules as they understood rules at different ages, and to carefully sorting through various hypotheses competing to explain the range of observations he and his coworkers made. He made some comparisons between his findings and theories that others had put forth, and he used these findings to assess the strengths and weaknesses of these theories in the light of what children actually did and said. At the time, this was a new method of psychological research that Piaget called "the clinical method." This methodological contribution to psychology ranks with that of Faraday's to physics. Claparède[3] was correct when he wrote,

> The method which in M. Piaget's hands has proved to be so prolific is also one of great originality. . . It is, in fact, that method of observation which consists in letting the child talk and in noticing the manner in which his thought unfolds itself. The novelty consists in not being content simply to record the answers given by the child to questions which have been put to him, but letting him talk of his own accord. . . . This clinical method . . . does not confine itself to superficial observations, but aims at capturing what is hidden behind the immediate appearance of things. It analyzes down to its ultimate constituents the least little remark made by the young subjects. . .

> But to bear fruit this method required to be completed by a judicious elaboration of the documents which it had served to collect. And this is where M. Piaget's qualities as a naturalist have intervened. All his readers will be impressed by the care with which he has set out his material, by the way in which he classifies different types of conversation, different types of questions, different types of explanations; and they will admire the suggestive use to which he puts this classification. . . .

> It is in this sense that the book before us may be said to be the work of a naturalist. And this is all the more remarkable considering that M. Piaget is among the best informed men on all philosophical questions. . . . But this thorough sphere of knowledge, far from luring him into doubtful speculation, has on the contrary enabled him to draw the line very clearly between psychology and philosophy, and to remain rigorously on the side of the first. His work is purely scientific. [Claparède (1926)]

Piaget asked himself where to look to find the most direct evidence pertaining to childish rule-making and rule-comprehension, and he found the answer to this in the games children play:

> Children's games constitute the most admirable social institutions. The game of marbles, for instance, as played by boys, contains an extremely complex system of rules, that is to say, a code of laws, a jurisprudence of its own. . . . If we wish to gain any understanding of child morality, it is obviously with the analysis of such facts as these that we must begin. All morality consists in a system of rules, and the essence of all morality is to be sought for in the respect which the individual acquires for these rules. The reflective analysis of Kant, the sociology of Durkheim, or the individualistic psychology of Bovet all meet on this point. The doctrines begin to diverge only from the moment that it has to be explained how the mind comes to respect these rules. For our part, it will be in the domain of child psychology that we shall undertake the analysis of this "how."

> Now, most of the moral rules which the child learns to respect he receives from adults, which means that he receives them after they have been fully elaborated, and often elaborated, not in relation to him and as they are needed, but once and for all and through an uninterrupted succession of earlier adult generations.

> In the case of the very simplest social games, on the contrary, we are in the presence of

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[3] Édouard Claparède (1873-1940) was a well known Swiss neurologist and child psychologist. He founded the Rousseau Institute and was professor of psychology at the University of Geneva from 1915-1940.

rules which have been elaborated by the children alone. It is of no moment whether these games strike us as "moral" or not in their contents. As psychologists we must ourselves adopt the point of view, not of the adult conscience, but of child morality. Now, the rules of the game of marbles are handed down, just like so-called moral realities, from one generation to another, and are preserved solely by the respect that is felt for them by individuals. The sole difference is that the relations in this case are only those that exist between children. The little boys who are beginning to play are gradually trained by the older ones in respect for the law; and in any case they aspire from their hearts to the virtue, supremely characteristic of human dignity, which consists in making correct use of the customary practices of a game. As to the older ones, it is in their power to alter the rules. If this is not "morality," then where does morality begin? At least it is respect for rules, and it appertains to an enquiry like ours to begin with the study of facts of this order. . . . [In] the case of play institutions, adult intervention is at any rate reduced to a minimum. We are therefore in the presence here of realities which, if not amongst the most elementary, should be classed nevertheless amongst the most spontaneous and the most instructive. [Piaget (1932), pp. 13-14]

It has been correctly said of Piaget's work that

Reading a book by Piaget is like entering a system. To a large extent he and his collaborators (but particularly he) are builders of an impressively structured whole – an experimentally based and controlled set of truth judgments about knowing and knowledge. It seems almost irrelevant to choose just a single book out of his enormous oeuvre. Always one meets a number of fundamental concepts which have arisen through many decades of experimental work with hundreds of collaborators, and from very productive thinking. [Sunier (1977), pg. vi]

So it is with *The Moral Judgment of the Child*. There are some psychologists, particularly in America, who appear to labor under a misconception that what is probably the most famous aspect of Piagetian theory – the theory of assimilation and accommodation – first appeared in his well known book *The Origins of Intelligence in Children* (1952). If so, this reveals a most dismal lack of education on their part. Equilibration, assimilation and accommodation were manifested and recognized from the very beginnings of Piaget's research. The importance of equilibrium appears again in *The Moral Judgment of the Child*.

Piaget's study brought out the following:

From the point of view of the practice or application of rules four successive stages can be distinguished.

A first stage of purely *motor* and *individual* character, during which the child handles the marbles at the dictation of his desires and motor habits. This leads to the formation of more or less ritualized schemes, but since the play is still purely individual, one can only talk of motor rules and not of truly collective rules.

The second may be called *egocentric* for the following reasons. This stage begins the moment when the child receives from outside the example of codified rules, that is to say, some time between the ages of two and five. But though the child imitates this example, he continues to play either by himself without bothering to find play-fellows, or with others, but without trying to win, and therefore without attempting to unify the different ways of playing. In other words, children at this stage, even when they are playing together, play each one "on his own" (everyone can win at once) and without regard for any codifications of rules. This dual character, combining imitation of others with a purely individual use of the examples received, we have designated by the term Egocentrism.

A third stage appears between 7 and 8, which we shall call the stage of incipient *cooperation*. Each player now tries to win, and all, therefore, begin to concern themselves

with the question of mutual control and unification of the rules. But while a certain agreement may be reached in the course of one game, ideas about the rules in general are still rather vague. In other words, children of 7-8, who belong to the same class at school and are therefore constantly playing with each other, give, when they are questioned separately, disparate and often entirely contradictory accounts of the rules observed in playing marbles.

Finally, between the years of 11 and 12, appears a fourth stage, which is that of the *codification of rules*. Not only is every detail of procedure in the game fixed, but the actual code of rules to be observed is known to the whole society. There is remarkable concordance in the information given by children of 10-12 belonging to the same class at school, when they are questioned on the rules of the game and their possible variations.

These stages must of course be taken only for what they are worth. It is convenient for the purposes of exposition to divide the children up in age-classes or stages, but the facts present themselves as a continuum which cannot be cut up into sections. This continuum, moreover, is not linear in character, and its general direction can only be observed by schematizing the material and ignoring the minor oscillations which render it infinitely complicated in detail. So that ten children chosen at random will perhaps not give the impression of a steady advance which gradually emerges from the interrogatory put to the hundred odd subjects examined by us at Geneva and Neuchâtel. [Piaget (1932), pp. 26-28]

It must also be noted that Piaget *et al*. documented some gender-specific differences between little boys and little girls in this study. On the average, little girls appear to reach the successive stages slightly earlier than little boys. Probably the most pronounced difference, however, appears in the fourth stage. Little boys come to display a keen interest in rule-making for the sake of rule-making that is worthy of a parliament, and tend to promulgate very complicated systems of rules, corner cases and variations. Little girls, on the other hand, display far less interest in such legalistic and hair-splitting legislating and on the whole tend to pay more attention to group congeniality and plain old "just getting along" with each other. Even so, these differences are rather slight and appear to be differences in degree rather than differences in kind. Whether these differences are due to gender-related neurological differences[4] or to the kinds of experiential differences that occur for boys vs. girls or to a combination of both is not currently known[5], but it is theoretically likely that it happens as a consequence of both factors working in combination.

The findings above pertain to the way in which rules are put into practice. He also found that an overall pattern in the development of the child's understanding of rules exists:

If, now, we turn to the consciousness of rules[6] we shall find a progression that is even more elusive in detail, but no less clearly marked if taken on a big scale. We may express this by saying that the progression runs through three stages, of which the second begins during the egocentric stage and ends towards the middle of the stage of cooperation (9-10), and of which the third covers the remainder of this cooperating stage and the whole of the stage marked by the codification of rules.

During the first stage, rules are not yet coercive in character, either because they are

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[4] Such differences are now known to exist. For example, the average size and connectivity of the *corpus callosum* differs between men and women, and women on the average have a larger *corpus callosum*.
[5] Mental physics cannot draw any such distinction because of the principle of thorough-going *nous-soma* reciprocity. Differences in biological development will be reflected in differences in mental development, and differences in experience will be reflected in neurological differences. The popular distinction drawn between "nature vs. nurture" is not an objectively valid distinction.
[6] more accurately, the child's *cognizance* of the rules. Piaget tends to use the word "consciousness" when he means "cognizance" – or, at least, his translators tend to do this. I have no knowledge of French and so I am forced to rely on Piaget's translators to accurately render his ideas into English.

purely motor, or else (at the beginning of the egocentric stage) because they are received, as it were, unconsciously[7], and as interesting examples rather than as obligatory realities.

During the second stage (apogee of egocentric and first half of cooperating stage) rules are regarded as sacred and untouchable, emanating from adults and lasting forever. Every suggested alteration strikes the child as a transgression.

Finally, during the third stage, a rule is looked upon as a law due to mutual consent, which you must respect if you want to be loyal but which it is permissible to alter on the condition of enlisting general opinion on your side.

The correlation between the three stages in the development of consciousness of rules and the four stages relating to their practical observance is of course only a statistical correlation and therefore very crude. But broadly speaking the relation seems to us indisputable. The collective rule is at first something external to the individual and consequently sacred to him; then, as he gradually makes it his own, it comes to that extent to be felt as the free product of mutual agreement and autonomous conscience. And with regard to practical use, it is only natural that a mystical respect for laws should be accompanied by a rudimentary knowledge and application of their contents, while a rational and well-founded respect is accompanied by an effective application of each rule in detail. [*ibid*., pp. 28-29]

§ 4. On the Larger Scale Significance of These Findings

It would be one of the most natural reactions I can conceive if a person were to think, "What possible pertinence could knowing how boys play marbles have for the weightier question of the human nature of social compacts?" Nonetheless, the summation of findings just quoted, when examined keenly and stood side by side in comparison with larger scale social phenomena, are found to contain broader principles of great significance. For a number of pedagogical reasons, I think it is important to bring these out right now rather than, as is the more usual practice in science writing, to wait until later.

Now, summaries like those above are themselves higher concepts abstracted from lower concepts of specific instances. One should not in general make abstractions upon abstractions, as I am about to do, without first being aware of the details of these more specific instances. A few specific examples are provided in the sections that follow, but I urge you to not be satisfied with just these and to examine all the meticulously detailed controlled observations Piaget documents in Piaget (1932) in the context of what I am about to say in *this* section. Again, the reason for this is because it is highly risky, scientifically, to make an abstraction upon an abstract concept without knowing details the abstract concept understands. This is something Bacon warned us about at the dawn of what historians have come to be called the Age of Reason:

> 19. There are and can exist but two ways of investigating and discovering truth. The one hurries on rapidly from the senses and particulars to the most general axioms, and from them, as principles and their supposed indisputable truth, derives and discovers the inter-mediate axioms. This is the way now in use. The other constructs its axioms from the senses and particulars, by ascending continually and gradually, till it finally arrives at the most general axioms, which is the true but unattempted way.

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[7] more accurately, "without deep conceptual distinction" rather than "unconsciously" (because the latter denotes "without conceptualization at all"). All meanings are at root practical, and Piaget's findings are more accurately stated as: first-stage children are primarily developing the manifold of rules (e.g., how to shoot a marble) rather than contextual concepts of how the skill fits into a larger scheme of organized play. This interpretation is congruent with his later work on the empirical nature of cognizance documented and recorded in Piaget (1974).

20. The understanding when left to itself proceeds by the same way as that which it would have adopted under the guidance of logic, namely, the first; for the mind is fond of starting off to generalities, that it may avoid labor, and after dwelling on a subject is fatigued by experiment. But those evils are augmented by logic, for the sake of ostentation of dispute.[8]

21. The understanding, when left to itself in a man of steady, patient, and reflecting disposition (especially when unimpeded by received doctrines), makes some attempt in the right way, but with little effect, since the understanding, undirected and unassisted, is unequal to and unfit for the task of vanquishing the obscurity of things.

22. Each of these two ways begins from the senses and particulars, and ends in the greatest generalities. But they are immeasurably different; for the one merely touches cursorily the limits of experiment and particulars, whilst the other runs duly and regularly through them; the one from the very onset lays down some abstract and useless generalities, the other gradually rises to those principles which are really the most common in nature. . . .

24. Axioms determined upon in argument can never assist in the discovery of new effects; for the subtlety of nature is vastly superior to that of argument. But axioms properly and regularly abstracted from particulars easily point out and define new particulars, and therefore impart activity to the sciences. [Bacon (1620), Bk I]

Piaget's findings illuminate in a specific microcosm a social phenomenon that, when one looks for it, is found to reoccur in more sophisticated but not essentially different forms in the adult world of social and non-social interactions. To put it bluntly, Piaget's stages *reoccur in stages* on a larger adult platform, differing in essence only in the fact that adult manifolds of rules and manifolds of concepts are more developed, more complicated, and more interlocking than those of young children. *But the process of judgmentation remains the same*. Adults merely have more mental "raw material" to work with in ratio-expression and motivation. Figure 5.1 illustrates this concept; we might call it "re-staged stages of rule judgmentation." To borrow a metaphor from Mandelbrot (1983), we might say it reflects a "fractal geometry of human judicial Nature."

The only significantly different observational aspect to re-staging is that Piaget's first "motor stage" of rule practice tends to more easily escape an observer's notice. It is nonetheless present – the "flavor" of that fact is captured in the American colloquialism, "I was on autopilot." Do you have a "routine" or a "ritual" that you run through most mornings when you first get to work? (Example: I start the coffee pot going, then check my Email, then get some coffee). Do you get a little bit tense or cranky if something disrupts your usual routine? If so, this is one of your own personal adult examples of "motor stage" behavior.

Piaget's research observations also show that even for a single particular individual, the stage of development is not uniform over all situations. This is not as plainly evident in the cases documented in Piaget (1932) but appears much more clearly in other cases involving childish judgments concerning realism and causality [Piaget (1929, 1930)]. This important variability factor can, however, be laid to *differences in context* within which new situations are understood.

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[8] At the time Bacon wrote this (1620) what he says could justly be taken as nothing more than his opinion (a form of "axiom") based on his own personal experience. Add to this the presence of what can be called Bacon's tendency to deliver moralizing sermons and it is easy to dismiss him. However, what he says here about jumping to unfounded generalizations is in fact a common characteristic of human behavior. What we know today that Bacon could not know in his day is the natural ground for this behavior. The ground is the mental physics of the process of pure *impatient* Reason. Ratio-expression seeks the quickest and most efficacious conceptualizations the Organized Being can find that will restore equilibrium under the categorical imperative of pure practical Reason. Metaphorically, Reason "cares" about equilibrium *and nothing else*. Reflective judgment does not judge "truth" but, rather, *expedience* for equilibrium.
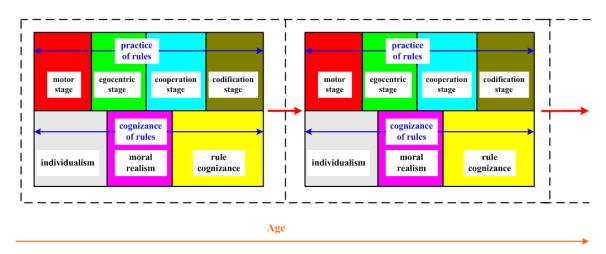
Figure 5.1: Simplified illustration of the phenomenon of re-staged stages of rule judgmentation.
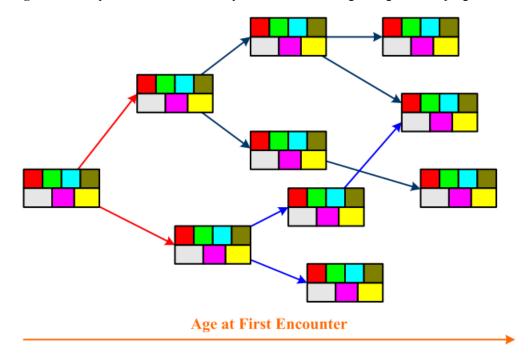

Figure 5.2: Illustration of situation-by-situation re-staging in rule judgmentation. The rectangular boxes denote the state of rule judgmentation for a particular situation. The color schema used in the rectangles is the same as in figure 5.1. The timeline denotes the subject's age when he encounters a new situation for the first time. Rule and concept structures for new situations are developed from the manifolds as they exist at the time of encounter, but because these manifolds undergo further accommodations over time the individual rectangles do not represent static states of judgmentation capacity. Rather, each situation box can continue to evolve and develop, leading to follow-on development of temporally downstream situations.

Figure 5.2 illustrates this situation-by-situation variation in rule judgmentation. New situations are always initially understood and judged from the foundation of the individual's structures of practical rules and concepts as these structures exist at the time of encounter. Furthermore, new situations have their first structural impact on the manifold of rules; objective understanding of the new situation, via accommodations and additions to the manifold of concepts, follows after the practical accommodations [Piaget (1974)]. All meanings are practical before they are understood conceptually. The dependency of judgmentation on the states of the manifolds at time

of encounter is to be expected theoretically from the principles of mental physics as well as empirically by Piaget's findings regarding the structural development of equilibration [Piaget (1975)]. Furthermore, this is all consistent with empirical observations of the development of memory and intelligence [Piaget & Inhelder (1968)] and on the assimilation of perceptions into the Organized Being's operative mental transformation structures:

> [While] operations elaborate general frameworks and tend to reduce the real to structures of deducible transformations, perception is of the *here and now* and serves the function of fitting each object or particular event into its available assimilative frameworks. Perception is not therefore the source of knowledge because knowledge derives from the operative schemes of action as a whole. Perceptions function as connectors which establish constant and local contacts between actions or operations on the one hand and objects or events on the other. Perceptual messages are transmitted in a figurative form, which is the only form available, and are decoded by being integrated, as far as possible, into the system of transformations. [Piaget (1961), pg. 359]

It is therefore both inaccurate and incorrect to characterize the individual as being in just one simple stage of development of rule judgmentation, such as is depicted by the first dotted box in figure 5.1, at any one point in time of life. The real situation is much more complex than this, is situationally dependent in every particular situation, and can only be understood *holistically*. It is a *field* problem and to understand it, which is to say to understand it mathematically, we must make use of the mathematics of embedding field theory and embedding field graphs.

It is perhaps easier in social situations to apprehend that there is a "moral" judicial context. It is perhaps more difficult in non-social situations to appreciate that this is also so. Nonetheless, such is the case. The key to understanding this is to understand that the child's earliest conceptions of causality *in every situation* have a moral basis and that notions of *physical* causality come relatively late to little children:

> The evolution of the idea of causality in the child follows very much the same lines as those we have been observing in connection with the notion of reality. But it is important at this point to recall the facts in all their complexity. If we decide to do away with arbitrary simplification, we shall find no less than 17 types of causal relation in child thought. . . .
>
> The first type is that of psychological causality, which is both causal and final[9]; let us call it the *motivation* type. For example, God or men send us dreams because we have done things that we ought not to have done. This type is, no doubt, the most primitive, but it is also the one that survives the longest. Its scope is reduced, however, as mental development proceeds, since things in general cease to be thought of as conscious or as specially made by men. But during the primitive stages [of childish thought] the motivating relation is omnipresent. . . . there are two Salève mountains because there must be one for grown-ups and one for children[10].
>
> The second type is that of pure *finalism*. This type overlaps with the preceding one to a certain extent, but it gradually separates itself from it. When the child says that the river flows so as to go into the lake, the river is not necessarily endowed with consciousness, nor the makers of things with a motive. . . . It is much the same when we say, in accordance with ordinary common sense, that ducks have webbed feet so as to swim better. . . .
>
> A third type is constituted by *phenomenistic causality:* two facts given together in

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[9] "final" in the connotation of Aristotle's "final causes," not in the connotation of a consummation of thought and understanding, i.e., one's "final conclusion about the matter." Psychological causality is purposive.

[10] Piaget's young subjects tended to declare that the larger of the two mountains was for the grown-ups and the smaller was for the children. They also said there *had to be two* so that children could have their own.

perception, and such that no relation subsists in them except that of contiguity in time and space, are regarded as being connected by a relation of causality. . . . A child will say that one pebble sinks to the bottom of the water because it is white, that another pebble is light because it is black, that the [sun] remains suspended in the sky because it is yellow and bright, and so on. Anything may produce anything. . . . [Phenomenistic] causality is essentially unstable; as soon as it is established, a phenomenistic relation transforms itself into one that is animistic, dynamic, magical, etc. . . .

A fourth type of relation is *participation*. This type is more frequent than would at first appear to be the case, but it disappears after the age of 5-6. Its principle is the following: two things between which there subsist relations either of resemblance or of general affinity are conceived as having something in common which enables them to act upon one another at a distance . . .

Closely akin to participation is *magical causality* (a fifth type), magic being in many respects simply participation: the subject regards his gestures, his thoughts, or the objects he handles as charged with efficacy, thanks to the very participations which he establishes between those gestures, etc., and the things around him. . . . But participation and magic are connected even more closely with psychological causality. For not only does the child regard his desires as efficacious in themselves, but all realism presupposes a realism of thought and gesture, that is, a realism of signs in general. And this realism is the result of that initial confusion between the self and the external world, which is the very thing which primitive psychological causality implies.

A sixth type, closely related to the preceding ones, is *moral causality*. The child explains the existence of a general movement or of a given feature by its necessity, but this necessity is purely moral: the clouds "must" advance in order to make night when men go to bed in order to sleep; boats "have to" float, otherwise they would be of no use, etc.

Closely akin to psychological causality or finalism, but with an added element of necessity, moral causality is also related to that form of participation which we have called dynamic: external objects have intentions which participate with ours, and in this way our desires force them to obey us with purely moral or psychical laws. [Piaget (1930), pp. 258-262]

Such are the empirical findings from studies of childish thinking and logic. It is, however, quite wrong to think that all such childish conceptions disappear in adulthood. There are professional athletes who will wear a "lucky shirt" to the stadium on game day or pull one sock up higher than the other because they were riding that way the last time he came to bat and got a hit. There are high-paid business executives who wear a "power tie" to important meetings. Childish romances and superstitions do not disappear in adulthood; they merely aren't as cute.

There is little room to doubt that Piaget found these characteristics of childish thinking, to say the least, surprising and even a bit paradoxical. However, he was true to Newton's dictum and "made no hypothesis" about why children think like this. Indeed, the limitations of what could be observed through experiment allowed for no such speculations in any scientifically valid way prior to the development of mental physics. Today we are in a rather better position.

Whenever a person thinks something "ought to be" this way or that way, he is in essence making a kind of "moral" judgment. Yet the noetic grounds for such kinds of judgments cannot properly be called "moral" in the common usages of that word. The manifold of rules is not a "moral manifold" *per se*, but it *is* a **value structure** [Wells (2009), chapters 9-10]. Under Critical epistemology, a **value** is the form of an affective perception of a desire presented in an aesthetic Relation (the sense of interest) and is understood from the judicial Standpoint of Critical metaphysics. The manifold of rules is a value structure insofar as the manifold is regarded, in context with reflective judgment, as a system of self-organized transformations that work by adaptation. In relationship to this, *values constitute conditions for the assertion of rules*.

On the one hand, a child is less rule-bound than an adult because his manifold of rules has not nearly so complex a structure of interconnecting maxims (*all* of which must be not-incompatible if the formula of the categorical imperative is to be satisfied) than is the adult case. On the other hand, however, the relative simplicity of the child's manifold of rules in comparison with the adult's *also* has the consequence that the child's practical hypothetical imperatives are more often stimulated by reflective judgments because he has not the same range of possible reactions that the adult has at his disposal. Having fewer rules in the manifold results in any one particular rule being provoked into activity *more often*. A human being cannot choose to *not* react to the provocation of a practical hypothetical imperative by a *parástase* of reflective judgment. This produces an important observable phenomenon Piaget called *moral realism*.

§ 5. Moral Realism

Moral realism is the affective counterpart of the naive objective realism responsible for the individual's development of objective concepts of ontology-centered pseudo-metaphysics. *All* human beings begin life as naive objective realists and, equally, *all* human beings exhibit the traits of moral realism. Neither characteristic of judgmentation is ever completely abolished even though most adults come to express them much less frequently than do young children.

Piaget hypothesized that the phenomenon of moral realism was grounded by an attitude he called "unilateral respect." In this, he was not incorrect in some particulars. But he was also not adequately correct because his concept of "respect" was too simplified and he missed the Critical ground of all attitudes we call respectful[11]. He divided the general idea of "respect" into two categories, which he called "unilateral respect" and "mutual respect." These ideas are useful and within particular limited contexts are true, but neither of them are fundamental nor can a theory of ethics be grounded by them with real objective validity. They are not, as he supposed, *sui generis* functions of judgmentation but merely convenient empirical labels for two specific classes of behaviors. Piaget's naturalism ended where his speculative rationalism of "respect" began.

None of this, however, diminishes the importance of the experimental observations Piaget and his co-workers made or invalidates his conclusions in regard to the *Existenz* of appearances of moral realism. The hole in the theory is not in its scientific description of the phenomenon but is instead in his rational theory of the Nature of its *ground*. What, then, is moral realism?

> We shall therefore call moral realism the tendency which the child has to regard duty and the value attaching to it as self-subsistent and independent of the mind, as imposing itself regardless of the circumstances in which the individual may find himself.
>
> Moral realism thus possesses at least three features. In the first place, duty, as viewed by moral realism, is essentially heteronomous. Any act that shows obedience to a rule[12] or even to an adult, regardless of what he may command, is good; any act that does not conform to rules is bad. A rule is therefore not in any way something elaborated[13], or even judged and interpreted by the mind; it is given as such, ready made and external to the mind. It is also conceived of as revealed by the adult and imposed by him. The good, therefore, is rigidly defined by obedience.
>
> In the second place, moral realism demands that the letter rather than the spirit of the law

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[11] In point of fact, Piaget misunderstood the proper Critical idea of "respect" (*Achtung*), a misunderstanding that Kant himself is partly responsible for promoting [Wells (2006), chapter 13, pp. 1118-19, 1131-32, 1136-37, 1188-94].

[12] Here Piaget does not refer to a practical rule of Reason but, rather, to maxims such as "eat all your vegetables" or "wash behind your ears."

[13] by the child

shall be observed. This feature derives from the first. . . . [At] the very outset of the moral
evolution of the child, adult constraint produces . . . a sort of literal realism of which we
shall see many examples later on.

In the third place, moral realism induces an objective conception of responsibility. We
can even use this as a criterion of realism, for such an attitude towards responsibility is
easier to detect than the two that precede it. For since he takes rules literally and thinks of
good only in terms of obedience, the child will at first evaluate acts not in accordance with
the motive that has prompted them but in terms of their exact conformity with established
rules. Hence this objective responsibility of which we shall see the clearest manifestations
in the moral judgment of the child. [Piaget (1932), pp. 111-112]

These are the basic characteristics in appearances of moral realism and Piaget's first empirically-
theoretic interpretations of the phenomenon. The latter is not correct on all points. For instance, it
is not Critically correct to say "values attach to duties." Rather, *concepts* of duties and affective
parástases of values are conjoined in meaning implications by reflective judgment.

Moral realism is not confined to children. We see it, for example, in objectively-literal moral
doctrines held by most societies we term "primitive" societies and in a number of religious
doctrines legislated by various religious sects. Many sects of Christian Evangelical Protestantism,
for example, tend to dogmatize tenets of moral realism – although this is by no means confined
solely to Christianity and tends to appear in most forms of fundamentalism. In the United States,
the past few decades have likewise witnessed an upsurge in objectively-literal interpretations of
criminal law, a development indicative of a resurgence of moral realism in some people's
attitudes regarding ideas of justice. It is the mark of a devolutionary moral re-staging taking place
in the American legal and legislative institutions that can be labeled reactionary fundamentalism.
In Europe we can see a spreading contrary but no less objectively-literal legal dogmatism that can
be labeled liberal fundamentalism in European legal and legislative institutions. This is as much
an adult re-staging of moral realism as the American reactionary legal fundamentalism. In *both*
cases the re-staging is *simultaneously* illiberal and anticonservative in comparison with the
original contexts of the adjectival terms liberal and conservative[14].

Moral realism, therefore, is a phenomenon of great pertinence to social compacts. For that
reason, we examine its simpler manifestations in childish behaviors and attitudes. Perhaps the
most striking feature of moral realism is its "letter of the law" character. The child's conception of
duties and right-and-wrong are rigidly fixed on literal and objective interpretations of
responsibility. Piaget made observations of children as young as 1^+ years of age that exhibited
this character. We will take for our first example one pair out of several observations he made
where the subject was his own daughter, "J.":

For some time J. has had a very small appetite, with the result that during this period of
her life[15] the essential rules of her universe were those appertaining to food. The World-
Order decreed that one should take a cup of cocoa at four o'clock, a good bowlful of
vegetables in the middle of the day, a few little drops (of hydrochloric acid) in water just
before lunch, etc. Now once these orders had been accepted, right and wrong were defined
by the conformity or non-conformity of actions in relation to them, and this independently
of all possible intentions or circumstances. For example, one day J. at 2; 10 (7)[16] is not very
well and her mother feels that probably the usual plate of vegetables will be too much for

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[14] liberal: "pertaining to a free man"; conservative: "tending to preserve from loss, decay or injury"
[Webster's Unabridged Dictionary (1962)]. The modern nominal labels "liberal" and "conservative" are
both more accurately regarded as what Santayana called fanaticism: "A fanatic is one who redoubles his
effort after he has forgotten his purpose." Both describe what was once called "radicalism."
[15] age 2 years
[16] 2 years, 10 months, 7 days

her. Sure enough, after one or two mouthfuls J. shows signs of weariness. But she insists upon finishing her helping, because it is the rule. It is no good letting her off, she perseveres in her view, though she is not enjoying her food. Every time she is given a spoonful she cannot swallow it, but when the bowl is taken away she asks for it back, as though it were a sin not to empty it. Finally it is taken away and we try to reassure her by telling her that it is not her fault, that some days people are less hungry than others, etc. In spite of all these precautions taken by her mother, J. then begins to cry. Even when she has been comforted she still shows signs of remorse, promises to go to sleep, etc.

Another example. At the age of 2; 10 (23), J. is taking her hydrochloric acid as usual. But too many drops have been put in the glass, and J. is told that she need not drink it all. Sure enough, after taking a draught or two she complains that it prickles; she looks disgusted and even feels sick. All the same she wants to drink it all up. Her mother repeats that it is not necessary and lifts her down from her chair. J. bursts into tears as though she had done wrong. She comes back to the glass and insists upon drinking it all up. [Piaget (1932), pg. 151]

Marveling over small children's singular fixedness on unbending moral compliance to rules that an adult views as void of any moral content, Piaget remarked,

These last two examples seem to demonstrate how strong and spontaneous is the child's evaluation of objective responsibility. It is even staggering to find that in a little girl who has never known what authority is, and whose parents make a point of cultivating autonomy of conscience in their children, the orders received should lead to so stubborn a moral realism. A rule emanating from the parents brings about a sense of duty against which the later attenuations of the parents themselves are for the moment powerless. It is true that in the three cases we have just quoted (cleanliness and rules about food) pride may play a certain part. The child will not admit defeat. But this very pride presupposes a realistic consciousness of rules. If the child did not consider it a moral lapse in itself not to finish her glass of medicine, her bowl of vegetables, or her cup of cocoa, she would not feel humiliated at being let off these obligations. [*ibid*., pp. 151-152]

Piaget described a method he employed to study the way children render moral judgments. In it, a child would be told a pair of simple stories. Here is one of the story pairs used:

A.   A little boy who is called John is in his room. He is called to dinner. He goes into the dining room. But behind the door there was a chair, and on the chair there was a tray with fifteen cups on it. John couldn't have known that there was all this behind the door. He goes in, the door knocks against the tray, bang go the fifteen cups and all get broken!

B.   Once there was a little boy whose name was Henry. One day when his mother was out he tried to get some jam out of the cupboard. He climbed up on to a chair and stretched out his arm. But the jam was too high up and he couldn't reach it and have any. But while he was trying to get it he knocked over a cup. The cup fell down and broke.

After being told the stories, the child would be asked to repeat them to order to make sure he had understood them. Then he would be asked: (1) were the children in the stories naughty? and (2) which of the two is naughtiest, and why?

Piaget *et al.* found that the youngest children rendered judgments based upon the objective consequence with no mitigation made for intention or accident. As children grew older, the subjective intentions of the characters came more and more into play as the determining factor in assigning "naughtiness" to the situation. Here are two examples from younger subjects. The psychologist's words are give in regular font, the child's responses in italics.

GEO (age 6): "Have you understood these stories? – *Yes*. – What did the first boy do? –

He broke eleven cups. – And the second one? – *He broke a cup by moving roughly.* – Why did the first one break the cups? – *Because the door knocked them.* – And the second? – *He was clumsy. When he was getting the jam the cup fell down.* – Is one of the boys naughtier than the other? – *The first is because he knocked over twelve cups.* – If you were the daddy, which one would you punish most? – *The one who broke twelve cups.* – Why did he break them? – *The door shut too hard and knocked them. He didn't do it on purpose.* – And why did the other break a cup? – *He wanted to get the jam. He moved too far. The cup got broken.* – Why did he want to get the jam? – *Because he was all alone. Because his mother wasn't there.* – Have you got a brother? – *No, a little sister.* – Well, if it was you who had broken the twelve cups when you went into the room and your little sister who had broken one cup while she was trying to get the jam, which of you would be punished the most severely? – *Me, because I broke more than one cup."*

SCHMA (age 6): "Have you understood the stories? Let's hear you tell them. – *A little child was called in to dinner. There were fifteen plates on a tray. He didn't know. He opens the door and breaks the fifteen plates.* – That's very good. And now the second story? – *There was a child. And then this child wanted to go and get some jam. He gets on to a chair, his arm catches on to a cup, and it gets broken.* – Are these children both naughty, or is one not so naughty as the other? – *Both are just as naughty.* – Would you punish them the same? – *No. The one who broke fifteen plates.* – And would you punish the other one more, or less? – *The first broke lots of things, the other one fewer.* – How would you punish them? – *The one who broke the fifteen cups: two slaps. The other one, one slap."*
[*ibid.*, pp. 124-125]

Most of the younger children gave answers of this sort, exhibiting the phenomenon of objective responsibility in moral judgment and typically assigning the greater punishment to the greater material damage without regard to subjective culpability. Older children, however, reverse this:

CORM (age 9):   *"Well, the one who broke them as he was coming isn't naughty, 'cos he didn't know there was any cups. The other one wanted to take the jam and caught his arm on a cup.* – Which one is the naughtiest? – *The one who wanted to take the jam.* – How many cups did he break? – *One.* – And the other boy? – *Fifteen.* – Which one would you punish the most? – *The boy who wanted to take the jam. He knew, he did it on purpose."*

GROS (age 9):   "What did the first one do? – *He broke fifteen cups as he was opening a door.* – And the second one? – *He broke one cup as he was taking some jam.* – Which of these two silly things was naughtiest, do you think? – *The one where he tried to take hold of a cup was because the other boy didn't see. He saw what he was doing.* – How many did he break? – *One cup.* – And the other one? – *Fifteen.* – Then which one would you punish the most? – *The one who broke one cup.* – Why? – *He did it on purpose. If he hadn't taken the jam, it wouldn't have happened."* [*ibid.*, pp. 129-130]

Accompanying the objective responsibility of moral realism there is an objective realism attached to the rules themselves. This is so pronounced in very young children that Piaget dubbed it "rule sacredness." Here is an example:

GEO (age 6) tells us that the game of marbles began with *"people, with the Gentlemen of the Commune* [the Town Council whom he has probably heard mentioned in connection with road-mending and the police]. – How was that? – *It came into the gentlemen's heads and they made some marbles.* – How did they know how to play? – *In their head. They taught people. Daddies show their little boys how to.* – Can one play differently from how you showed me? – *I think you can, but I don't know how* [Geo is alluding here to variants already in existence]. – Anyhow? – *No, there are no games you play anyhow.* – Why? – *Because God didn't teach them* [the Town Council]. – Try and change the game. – [Geo then invents an arrangement which he regards as quite new . . .] – Is that one fair, like the

other one? – *No, because there are only three lines of three* [marbles]. – Could people always play that way and stop playing the old way? – *Yes, M'sieur.* – How did you find this game? – *In my head.* – Can we say, then, that the other game doesn't count and this is the one people must take? – *Yes, M'sieur. There's others too that the Gentlemen of the Commune know.* – Do they know this one that you have made up? – *Yes!* – But it was you who found it out. Did you find that game in your head? – *Yes.* – How? – *All of a sudden. God told it to me.* – You know, I have spoken to the gentlemen of the Commune, and I don't think they know your new game. – *Oh!* [Geo is very much taken aback]. – But I know some children who don't know how to play yet. Which game shall I teach them, yours, or the other one? – *The one of the Gentlemen of the Commune.* – Why? – *Because it is prettier."* [*ibid*., pp. 59-60]

The case of Geo does not differ all that much in substance from those of other children in the same developmental stage that Piaget documents. When he hears that "the Gentlemen of the Commune" do not know his invented variant of marbles, Geo is horrified and immediately repudiates his own innovation utterly. The passage of centuries will never make his version of the game "right" nor mediate the moral necessity of playing marbles according to the teachings of "the Gentlemen of the Commune."

Hand in hand with notions of objective responsibility and rule sacredness, we also find in young children an intriguing lack of any deep understanding of rules they have received from others, and often not even the ability to state a well-defined explanation of precisely what the rule is. For example, most children are told at an early age that "telling lies is naughty." This, however, does not mean the child clearly understands what precisely a "lie" is. Young children tend to equate "lies" not only to telling untruths but, in fact, to any proscribed speech such as saying "naughty words." Even a mistake is a "lie." Here are a couple of examples:

CLAI (6): "Do you know what a lie is? – *It's when you say what isn't true.* – Is '2 + 2 = 5' a lie? – *Yes, it's a lie.* – Why? - *Because it isn't right.* – Did the boy who said that '2 + 2 = 5' know it wasn't right or did he make a mistake? – *He made a mistake.* – Then if he made a mistake, did he tell a lie or not? – *Yes, he told a lie.* – A naughty one? – *Not very.* – You see this gentleman [a student]? – *Yes.* – How old do you think he is? – *Thirty.* – I would say 28. [The student then says he is 36]. – Have we both told a lie? – *Yes, both lies.* – Naughty ones? – *Not so very naughty.* – Which is the naughtiest, yours or mine, or are they both the same? – *Yours is the naughtiest, because the difference is biggest.* – Is it a lie, or did we just make a mistake? – *We made a mistake.* – Is it a lie all the same, or not? – *Yes, it's a lie."*

CHAP (7): "What is a lie? – *What isn't true, what they say they haven't done.* – Guess how old I am. – *Twenty.* – No, I'm thirty. Was it a lie you told me? – *I didn't do it on purpose.* – I know. But is it a lie all the same, or not? – *Yes, it's all the same, because I didn't say how old you really were.* – Is it a lie? – *Yes, because I didn't speak the truth.* – Ought you to be punished? – *No.* – Was it naughty or not naughty? – *Not so very naughty.* – Why? – *Because I spoke the truth afterwards!"* [*ibid*., pp. 143-144]

These children identify lying with the objective facts of the case at hand and with no tincture of any intention or subjective factor entering into the pronouncement (although deliberately saying what is not true is regarded by them as "naughtier" than making a simple mistake). Older children come to take subjectivity and intent into account and base their judgments on it rather than on the objectivity of the action and its consequences. Elsewhere Piaget refers to thinking characterized by the examples above as the "preoperational stage" of the development of intelligence in children [Piaget (1953), pp. 8-22]. What this means for our present context is that the child's understanding of rules consists entirely of specific perceptible examples, and his judgments are based upon these exemplars by subjective inferences of analogy and simile. He has

no understanding of why the rule is a rule, why it is to be obeyed, nor does he even trouble himself with being concerned about what the harm or badness in violating it might be. Crockery is not to be broken, untruths are not to be spoken, "naughty words" are not to be used, and marbles are to be initially arranged in *this* configuration and no other. A rule is a rule and that's that. Anything incongruent with the specific exemplars that constitute the child's understanding of the rule context is culpable, and that's that. This is what Piaget means when he says the rule is "external" to the child.

Moral realism in a little child can be and often is amusing and cute. But moral realism is not eradicated in the adult. For example, in higher mathematics the notion of what a "number" is takes on a very abstract and widespread set of *operational* significances, and it isn't much of an exaggeration to say that *any* set of arbitrary objects can constitute a set of numbers if the set is accompanied by mathematical definitions of operations and relations that can be performed on and applied to the members of that set. Most people, including most engineers, are not trained in this more abstract treatment of the idea of "number." The Boolean algebra used in computers is one example of this, but so is the practice in music of referring to chords numerically (as in the form of a work of music composition having a '1-4-5' chord structure; this mathematics-of-music allows the piece to be performed in whatever key the performer wishes).

In engineering there is a branch known as "signal processing" that contains a subspecialty known as "number theoretic signal processing." In number theoretic methods "numbers" of a different kind than those used in everyday arithmetic are introduced and new kinds of "number systems" are defined in order to achieve some technical or cost advantage [for an example see Agarwal & Burrus (1975)]. About 35 years ago a slightly younger colleague and I were working on a signal processing project and I proposed to use a number theoretic technique in it to speed up the product's calculations and lower its costs. I explained what I had in mind to my partner, Willy, (who was about 22 or 23 at the time). His reaction can best be described as 'horror.' *"You can't do that!"* he exclaimed passionately, *"You're messing with the number system!"* For Willy at that time, the everyday number system and all its rules was a sacred institution not to be messed with.

There is next to no room to doubt that the foundations of moral realism lie in personal experience. There is as little doubt that children (and adults) also apply a kind of double standard in evaluating the "naughtiness" of a moral fault or the punishment that should be meted out to a culpable offender. Piaget wrote,

> As we noted in certain cases, the child pays far more attention to intentions where his own memories are concerned than when he is being questioned about one or other of our little stories. Such a fact as this surely shows us that if the child's objectivist attitude (unmistakable enough in his theoretical thought) corresponds to anything in his concrete and active thought, there must have been a time-lag taking place between one of these manifestations and the other, for the theoretical attitude is certainly a late-comer as compared to the practical. But the problem goes deeper than this, and the question may be raised whether at any moment in the immediate experiences of his moral life, or at any rate those connected with clumsiness and lying, the child has ever been dominated by the notion of objective responsibility.

> Immediate observation – the only judge in the matter – is sufficiently explicit on this point. It is very easy to notice – especially in very young children, under 6-7 years of age – how frequently the sense of guilt on the occasion of clumsiness is proportional to the extent of the material disaster instead of remaining subordinate to the intentions in question. . . .

> We can therefore put forward the hypothesis that judgments of objective responsibility occurring in the course of our interrogatory were based upon a residue left by experience that had really been lived through. Although new material may since have enriched the child's moral consciousness and enabled him to discern the nature of subjective

responsibility, these earlier experiences are sufficient, it would seem, to constitute a permanent foundation of moral realism which reappears on each fresh occasion. Now since thought in the child always lags behind action, it is quite natural that the solution of theoretical problems such as we made use of should be formed by means of the older and more habitual schemes rather than the more subtle and less robust schemes that are in the process of formation. Thus an adult who may be in the midst of reviewing all his values and experiencing feelings of which the novelty surprises him, will, if he is suddenly faced with the necessity of solving someone else's problems, very probably appeal to moral principles which he has discarded for himself. For example, he will, if he is not given time to reflect, judge his neighbor's actions with a severity which would be incomprehensible in view of his present deeper tendencies, but which effectively corresponds to his previous system of values. In the same way, our children may perfectly well take account of intentions in appraising their own conduct, and yet confine themselves to the material consequences of actions in the case of the characters involved in our stories, who are indifferent to them. [*ibid*., pp. 135-137]

§ 6. Empirical Limitations of Piaget's Theory

There is raised at this point in empirical observations a question that we will find goes to the root of understanding the social-nature of making and keeping social compacts. Regarded from the perspectives of mental physics, the question amounts to inquiring into the relationship between the meanings of concepts and the sensuously unperceived *causata* of practical rules in the person's manifold of rules. As the latter are never introduced into the synthesis of apprehension and apperception, it is evident that Piaget's interrogatory method cannot peer directly into them. There is, in other words, the issue of (1) what Piaget called "the child's effective thought on morality" – by which phrase he seems to have meant, using the language of mental physics, the child's own appetitions of Self-determination in motoregulatory expression – vs. (2) the psychological "self-reporting" by the child (which communicates and exhibits only the manner of his understanding) and his affective behavioral expressions that present clues about his reflective judgments (which are, by their non-objective nature, autistic and incommunicable by language). The latter, again, do not expose the workings of practical judgment and practical constraint by the manifold of rules. Piaget put the problem thusly:

Two distinct levels of activity are to be distinguished in moral thought. First, there is effective moral thought, "moral experience" which is built up gradually in action as the subject comes in contact with reality and meets with shocks and opposition. It is that which leads him to form such moral judgments as will guide him to evaluate other people's actions when these concern him more or less directly. And there is also theoretical and verbal moral thought, bound to the former by all kinds of links, but as far removed from it as is reflective thought from immediate action. This verbal morality appears whenever the child is called upon to judge other people's actions that do no interest him directly or give voice to general principles regarding his own conduct independently of his actual deeds.

The analysis we were able to make of the judgments on responsibility deals only with the child's theoretical moral thought, and is in no way concerned with his practical and concrete moral thought (differing in this from our enquiry on the rules of a game where we were able to keep both aspects of the question simultaneously in view). Now with regard to this verbal plane our results were fairly consistent. Though we could not point to any stages properly so called, which followed one another in necessary order, we were able to define processes whose final terms were quite distinct from one another. These processes might mingle and overlap more or less in the life of each child, but they marked nevertheless the broad divisions of moral development. We saw, for example, that the child's theoretical morality could be subject either to the principles arising from unilateral respect (morality based on heteronomy and objective responsibility) or to those based on mutual respect (morality of inwardness and subjective responsibility).

But the problem before us now and already touched upon in the methodological remarks at the opening of the present chapter[17] is this. What do these results correspond to in the child's effective thought on morality? Two solutions are possible. It may be that verbal thought is a progressive conscious realization of the concrete thought. In that case the moral realism we met with and studied would correspond to a moral realism effectively at work in action, a realism that would no doubt already have been left behind by the time the children talked about it theoretically, but a realism which would none the less give rise to spontaneous reactions expressed in concrete acts. But it may also be that this verbal morality, whose manifestations we have observed, corresponds to nothing at all in the child's effective thought. The children would therefore never have manifested any moral realism in their concrete decisions and judgments. [*ibid*., pp. 174-175]

A few comments are called for here. First, what does Piaget mean by "moral thought"? This is a vague term in the Piagetian lexicon. Like the great majority of psychologists and philosophers, Piaget tends to treat the notion of "thought" as a primitive term and he therefore does not provide a crisp and practical *Realerklärung* of what precisely one is to understand by the term "moral thought." It is clear that sometimes he uses the term "thought" to mean cognition, but at other times – such as in this "effective thought" term – he seems to use it to mean the concrete determination of action schemes the person puts into effect. In Critical epistemology, thinking is cognition through concepts, and if anything is to be called *a* thought this can only be a *parástase* of cognitive intuition. Intuitions do signify meanings implications but an intuition is not the cause of putting a sensorimotor scheme into effect and, therefore, it is a Critical misuse of terminology to posit "effective thoughts" in the manner in which Piaget employs that term.

There is a long-standing, and sometimes rancorous, debate among psychologists on the question of "primacy of cognition vs. emotion." The polar extremes of this debate are represented on the one side by Lazarus ("cognition is primary") [Lazarus (1984, 1991)] and on the other by Zajonc ("preferences need no inferences") [Zajonc (1980)]. Most psychologists, including Piaget, tend to take up positions in between these two extremes but "lean" towards one side or the other. In Piaget's case, his leanings are clearly more towards Lazarus' side than towards Zajonc's. In point of fact, the debate is empty, without real scientific meaning, because it is based upon ontology-centered misconceptions. Affectivity does drive cognition in the early stages of infant life (because the new-born infant has no *a priori* manifold of concepts), but as a manifold of concepts is built up any talk of "primacy" becomes more and more meaningless because reflective and determining judgments are reciprocally co-determining.

Cognition is a factor in the determination of appetition and action, but it is only one of several and can *at most* be regarded as nothing more than what Margenau called a "partial cause" [Margenau (1977), pg. 393], and a rather remote partial cause at that. In this context, Piaget is correct in regard to his statement above about "theoretical and verbal moral thought" in the first paragraph quoted. However, we must ask: Is there any such thing as "moral realism effectively at work in action," as Piaget says in the third paragraph above? Piaget thinks so. He tells us this forthrightly:

As a matter of fact, it is our belief that even for the child, theoretic moral reflection does constitute a progressive conscious realization of moral activity properly so-called. Consequently, we think that the results set out above correspond in a certain measure to real moral facts. But the relations between thought and action are very far from being as simple as it is commonly supposed, and it will therefore be necessary to stress somewhat the point under discussion in order to grasp our results in their true perspective. [Piaget (1932), pg. 176]

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[17] chapter 2 of Piaget (1932), "Adult constraint and moral realism."

What are "moral activity properly so-called" and "real moral facts"? Piaget seems to presume that these things, whatever they are, are (to use Newton's famous phrase) "well understood by all." If that were true, there would be no millennia-old debate in philosophy over ethics theory. Piaget is in transit here from experimental observation to rational theory-building. Although his metaphysical grounds are principally epistemology-centered, it is nonetheless true that Piagetian epistemology (called "genetic epistemology") is infected in several places by ontology-centered presuppositions, and the present topic is one of those places. His theory comes down to what he called "the two aspects of respect" – so-called unilateral respect and so-called mutual respect.

In point of fact, the notion of "respect" used in Piagetian theory does not originate with Piaget. Instead he borrowed the term, and amended its idea, primarily from Durkheim's sociology theory[18], Bovet's psychology[19], Claparède's child psychology, and his *mis*understanding of Kant's theory. I would call its "final formulation" Piaget's but for the fact that he did not actually tell us what this final form is and what precisely is meant by this thing called "respect" that is modified by the adjectives "unilateral" and "mutual." The word "respect" is not a recognized technical term in psychology and Piaget uses it primarily in its English dictionary connotations of "the act of holding in high estimation, deference, or honor; a feeling of esteem; regard" [Piaget (1932), pp. 97-98]. Now, appearances can be so-characterized and affective perceptions can, through conceptualization, be verbalized in this way; but this vague idea of "respect" is not suitable as a scientifically proper idea of a cause nor does it adequately express a proper principle of natural science. When he introduces the notion of respect, Piaget sets aside his role as a naturalist and dons the robes of a speculator. His epistemology comes to an end at this point and its place is taken by pseudo-metaphysical presupposition.

Boiled down to its *logical* essence, Piaget's idea of "unilateral respect" reflects the rather obvious tendency a small child has to trust and obey its parents or primary caregivers. It is not hard to appreciate the practical origins of this tendency. Non-abusive and non-neglectful parents or caregivers are the suppliers of all the small child's needs and comforts. The child's earliest objective knowledge of these people is bound up with affective perceptions expedient for the dictates of the categorical imperative, and so the child's attitude towards and unquestioning belief in its parents can just as well be called unconditional trust as it can respect[20]. The child also tends to accord to some other adults this same unconditional trust, but this is largely and perhaps sometimes fully a consequence of the fact that the child makes inferences of analogy in forming its concepts of these other people. For example,

> DAR (1;8 to 2;5) . . . One evening a picture of some people he knew fell to the ground. Dar stood up in bed, crying and calling out: *"The mummies* (the ladies) *all on the ground, hurt!"* [Piaget (1929), pg. 212]

Baby Dar's reaction to seeing the photograph fall is an example of childish animism, but what I want to point out here is his concept that the ladies in the photograph are "mummies" (mothers).

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[18] Emile Durkheim, late 19th and early 20th century sociologist. His most important works include *The Division of Labor in Society* (1893), *The Rules of Sociological Method* (1895), and *Suicide* (1897).
[19] P. Bovet, "Les Conditions de l'obligation de conscience," *Année psychologique*, 1912.
[20] The situation when the parents or primary caregivers are abusive or neglectful is another matter altogether and one Piaget did not study. The effects left in the child's manifold of *rules* (and, subsequently, manifold of concepts) could hardly be more different. The situation when the caregiver is non-abusive and non-neglectful tends to primarily involve feelings of *Lust*, whereas the other situation primarily involves feelings of *Unlust*. The former leads to maxims for maintaining the experience, the latter for abolishing it. When the caregiver is sometimes non-abusive and tender, sometimes abusive, sometimes attentive, sometimes neglectful, the resulting manifold of rules will contain divers maxims, and ratio-expression directed at unifying the manifold can produce as fine a set of behavioral neuroses as one can imagine.

Piagetian "mutual respect" is, on the other hand, the product of socialization through the child's association with other children, especially those he regards as his peers. Boiled down to its logical essence, "mutual respect" is an idea that reflects the child's tendency to defer to the wishes of his peers on occasion *provided that* they also, on frequent enough occasion, defer to his. What Piaget calls "cooperation" is the product of these earliest childish ventures into the making of social compacts. We must understand the former ("mutual respect") by grounding this in an understanding of the latter (the mental physics of making social compacts). When overt rule mysticism and manifestations of moral realism begin to fade, this change in behavioral accidents is the visible expression of consequences of re-structurings in the manifold of rules that grow out of experience of social situations in which the child undertakes the making of social compacts.

Community folkways and mores are objects of widespread concepts of commonalities in the accidents of cooperation. To the extent that what we call moral custom is comprised of some subset of these concepts, commonly held ideas of moral custom *have their origin* in the making of social compacts, and the nature of community moral custom is *bound* to the mental physics of this compacting. Note that even racism is a community *morem* of this same sort (and one exhibiting moral realism). Ethics is therefore inseparable from the mental physics of the idea of the Social Contract and stands in relationship to it as consequence to ground. Phenomenal exhibitions of instances we call "moral" and "ethical" are, for this reason, sources of experimental and observational data in developing a deontological theory of the Social Contract. That is why we discuss the topics of morality and ethics in this treatise.

Piaget was not wrong to propose that some notion of "respect" is a factor in the moral judgment of children. The shortcoming in his theory is in inadequate understanding of what this term "respect" means in a *technical* context. In Critical epistemology, **respect** (*Achtung*) *is a self-produced affective perception of consciousness of the determination of one's will through a rational law without intervention from other influences of sense*. Let us take this *Realerklärung* apart a little and look at it closely. Critical **will** is a primitive Modality function in practical appetition; specifically, it is *Modality in the power of choice in which the determination of appetitive power is logically apodictic and transcendentally necessitated in regard to the manifold of rules*. Will is not some occult force, nor is it (as Piaget thought) a "regulation" of some sort. It is merely a *practical* capacity to beget objects according to the Organized Being's representation of these objects and to determine appetitive power for acting accordingly. When I say this determination is "without intervention from other influences of sense" this means that perceptions originating out of receptivity do not *bind* the determination of practical appetites. Rather, the determining factor in perception is vested in meaning implications signified by intuitions that are the produce of spontaneity, i.e., produced in sensibility from concepts. This type of meaning implication is *held-to-be-binding* (logically apodictic) by the Organized Being and it is in this delimited context that such a concept is said to *present* a rational *law*. When I say respect is an affective perception, I am saying that-which-is-properly-called-respect is a feeling of *Lust* or *Unlust* (denoting a connection via *psyche* with specific emotivity). When I say it is an affective perception **of** consciousness-of-a-determination-of-will, I mean that the source of the feeling is spontaneity in the free play of imagination and understanding. Every one of the statements I have just made comes from the principles of mental physics, the theory of which is provided in Wells (2009), the lexicon in Wells (2011) and the abridged glossary in this treatise.

This properly deontological explanation of respect does not detract from the scientific import and significance of the phenomenon of moral realism. Piaget was far more correct than not when he wrote,

> Moral realism seems to us to be due to the conjunction of two series of causes – those peculiar to the spontaneous thought of the child (childish "realism"), and those belonging to the constraint exercised by the adult. But this conjunction, far from being accidental, seems

to us to be characteristic of the most general processes of child psychology as they occur in the intellectual as well as the moral domain. For the fundamental fact of human psychology is that society, instead of remaining almost entirely inside the individual organism as in the case of animals prompted by their instincts, becomes crystallized almost entirely outside the individuals[21]. In other words, social rules, as Durkheim has so powerfully shown, whether they be linguistic, moral, religious, or legal, etc., cannot be constituted transmitted, or preserved by means of an internal biological heredity, but only through the external pressure exercised by individuals upon each other. To put it another way: As Bovet has demonstrated in the field of morals, rules do not appear in the mind of the child as innate facts, but as facts that are transmitted to him by his seniors, and to which from his tenderest years he has to conform by means of a *sui generis* form of adaptation. This, of course, does not prevent some rules from containing more than others an element of rationality, thus corresponding to the deepest functional constants of human nature. But whether they be rational or simply a matter of usage and consensus of opinion, rules imposed on the childish mind by adult constraint do begin by presenting a more or less uniform character of exteriority and sheer authority. . . .

As a result of this we have three processes to consider: the spontaneous and unconscious egocentrism belonging to the individual as such, adult constraint, and cooperation. But – and this is the essential point – the spontaneous egocentrism of the child, and the constraint of the adult, far from being each other's antithesis on all points, so far agree in certain domains as to give rise to paradoxical and singularly stable compromises. For cooperation alone can shake the child out of its initial state of unconscious egocentrism; whereas constraint acts quite differently and strengthens egocentric features (at any rate on certain points) until such time as cooperation delivers the child both from egocentrism and from the results of this constraint. [Piaget (1932), pp. 186-187]

As I said, Piaget gets more right than wrong in this passage. But we need to identify what he does get wrong and clean up this "Feynman dirt" so we can safely use the rest of his findings[22].

I'll begin with the most important one. Piaget is correct to say we have three processes to consider. He is incorrect to identify them as "egocentrism, adult constraint, and cooperation." There is a narrow and very strictly delimited context in which it is not erroneous to say this, and so the error does not merit being called egregious; he was, after all, focused on child psychology. The problem is that these "processes" do not extend into *adult* life without changing the way Piaget defines egocentrism, adult constraint and cooperation. I noted earlier that the stages Piaget identified – those of rule practice and cognizance of rules – reoccur in later situations. We cannot say we have correctly identified the scientific *Existenz* of a causal factor if we have to

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[21] It's okay to call this a "fact of psychology," but it does not merit being called "the fundamental" fact.

[22] There is a rather curious habit-of-thinking that I have found to be rather pervasive. I would be tempted to call it amazing but for the fact that I don't find it amazing; I used to be chronically guilty of it myself. (I tend to be more "understanding" of the missteps of others when I have myself made the same missteps). It is this: There is a tendency among many scholars, upon spotting an error some other scholar has made, to subsequently dismiss *everything* that scholar has said. This serves reequilibration if what else that scholar has to say is disturbing, and it is in this context a quite rational reaction, but it is hardly a scientific re-equilibration. No one is correct all the time about everything he says or thinks. One finds *some* truth even in otherwise erroneous ideas, although the more egregious the error is, the more difficult that truth usually is to find. I would say this habit-of-thinking might reflect a lack of proper education in philosophy were it not for the fact that philosophers are among the most chronic of offenders in this. The habit is as silly as if one were to think, "I cannot hit a curve ball; therefore no one else can either." The companion habit to this one is the habit of denying that a scholar's errors *are* errors because the rest of what he has to say serves expedience for equilibrium so well. Where I find one habit, I usually find the other too. Philosophers and educators come to my mind as particularly good exemplars of this, although as a class they do not present quite so clearly and frequently as the one comprised by many teenage boys and girls.

fundamentally redefine that factor in order to make it continue to fit later real experience.

The proof of this lies ahead in this treatise, but the correct three processes are the following. First, there is a process of making a judgment pertaining to a Relation of personality (you might need to review chapter 4 to remind yourself of what this Relation, and the others following, are). This is the Critical process in judgmentation that most closely corresponds to the childish appearances Piaget characterizes as egocentrism in childish thinking. Second, there is a process of making a judgment pertaining to a Relation of the person's situation with regard to external factors. This is the Critical process that most closely corresponds to Piaget's adult constraint. Third, there is a process of making a judgment pertaining to a reciprocal Relation between the person and the situation of another person. This most closely corresponds to Piaget's cooperation.

Among other things, these processes are the Critical underpinnings of theoretical concepts of moral judgments, and so to study them is to study the social-physics of moral judging. But, more importantly, they *also* underpin the person's Self-determination of appetites and, therefore, also address the issue that Piaget called "effective moral thought." Mental physics nails the "two distinct levels of activity" problem we saw Piaget refer to earlier and nails them in *one* mental physics dynamic. The three processes differ only in regard to Critical Relations of connections. Piaget was correct to hypothesize that both "levels of activity" were in some way connected, but an error comes from presuming that either level is the *cause* of the other. They are *coordinate* phenomena and one is not subordinated to the other.

In conceptualization (that is, in the structuring of the manifold of concepts), these processes give rise to ideas of *rules of Duty*. These conceptual rules logically divide, according to the process Relation involved in their determination, into three classes of Duty-rules. Kant called these classes: (1) Duties to oneself according to personality; (2) Duties to oneself according to one's situation; and (3) reciprocal Duties. The third class contains the class of concepts we usually call "moral duties" as a subset. Nonetheless, all three are classes of rules of Duty, and to introduce the notion of Duty is as much as to say that *all three* are constituents of **deontological morality**. Piaget was not in the least mistaken in regarding the "rule sacredness" with which a 7-year-old holds the rules of the game of marbles as an example of the appearance of childish moral judgment. It is *precisely* that under Critical epistemology. This is why Piaget's experiments and the observational data he provides are important for social-natural science. If a social-natural scientist ignores this data and launches his work from some set of "higher axioms" (as Bacon put it) *without* a thorough familiarity of the experiential facts, he is at serious risk of engaging in what Bacon called "idols of the theater" and the prognosis for his speculative findings is not too encouraging. I say this *even if those "higher axioms" are those of mental physics*. To use a metaphor, one should *know* his Faraday before *employing* his Maxwell.

§ 7. The Empirical Appearances of Rule Development

In Critical epistemology a **rule** is *an assertion made under a general condition*. I close this chapter with a look at Piaget's findings touching upon the conditions under which rules come into being. Piaget recognized three general classes of rule-types, which he called: (1) motor rules; (2) rules due to unilateral respect; and (3) rules due to mutual respect. These correspond to the three processes just discussed. To better understand these processes it is both helpful and necessary to examine the empirical genesis of rules as they appear in their simplest beginnings, i.e. in childish rule development. This is also and at the same time an examination of the development of moral judgments because the *social* distinction we commonly draw between amoral and moral rules is merely one of context, and social situation and is strongly tied to one's cultural upbringing.

For example, in America insincere flattery is usually regarded as a form of lying and the flatterer is usually held in contempt by others. In many Asian cultures, by contrast, insincere

flattery is just a form of expected politeness not all that different from greeting someone with "good morning" (an abbreviation of "I wish you a good morning"), and to *omit* it is regarded as rude. Similarly, a gift is regarded in some cultures as a "token of respect" while in others it is called a "bribe." In America, if a third-grader gives an apple to the teacher (which, in most cases, is actually the case of the child's parent sending an apple to the teacher), the teacher tends to regard the act as cute and innocent; the child's peers, on the other hand, often look upon it with reprobation and accuse the gift-giver of "brown nosing."

One of many little cross-cultural shocks a new American-born college professor finds himself having to adjust to is the habit many students from Asian countries have of presenting him with some sort of gift from their homeland when they first arrive. American students do not do this – there is a strong cultural stigma attached to it. Some foreign students do, and they choose this gift with care and with pride in their homeland (it is usually something like a small statuette or a bag of native tea or a teacup). The new professor usually doesn't realize that to refuse the gift is an insult to the student, who takes it as a sign of lack of esteem or even hostility for his person and of contempt for his homeland and his culture. The student, for his part, is utterly unaware that to the professor the gift is not a token of respect but rather a sort of insult to his character. To the student, to *omit* this gift-giving would be to deliberately insult his teacher. One could hardly ask for a better example of the cultural relativity of moral judgments.

Yet all this diversity in moral judgment arises from the same fundamental processes of mental physics. Human nature is human nature. Therefore, because the nature of being a human being is the same for all people, such differences can arise only from differences in experiences, from neurological pathology, and from both taken together. In this treatise we will consider only what sorts of differences the first makes.

First, it is important to be clear about the following point. The three processes enumerated at the end of the previous section do not come into being sequentially or as some sort of consequence of biological/intellectual maturation. They are merely different variants of one and the same central process of judgmentation, and the latent capacity for each of them exists from the beginning of life. The latency is due only to the state of the person's manifold of rules and manifold of concepts. This is something Piaget more or less indirectly noted in his studies:

> The baby (at the stage of motor intelligence) is asocial, the egocentric child is subject to external constraint but has little capacity for cooperation, the civilized adult of today presents the essential character of cooperation between differentiated personalities who regard each other as equals. There are, therefore, three types of behavior: motor behavior, egocentric behavior (with external constraint), and cooperation. And to these three types of social behavior there correspond three types of rules: motor rules, rules due to unilateral respect, and rules due to mutual respect. But here again, one must beware of laying down the law: for things are motor, individual and social all at once. As we shall have occasion to show, rules of cooperation are in some respects the outcome of rules of coercion and of motor rules. On the other hand, coercion is applied during the first days of an infant's life, and the earliest social relations contain the germs of cooperation. Here again, it is not so much a question of these successive features themselves as of the proportions in which they are present. Moreover, the way in which conscious realization and the time-lag from one level to another come into play is a further bar to our arranging these phenomena in a strict sequence [Piaget (1932), pg. 86].

I think I have already dealt adequately enough, at least for now, with the issue of Piaget's idea of "respect" in relationship to these behaviors and rules. As for the coexistence of all three types of rules, there is other evidence, gathered independently by other researchers, that point to this same empirical finding. Cooperative interactions, for example, can be observed between infants and their caregivers. Stanley Greenspan, who is noted for his work with autistic children, tells us,

At this second stage[23], when caregiver and child mutually fall in love, adults actively and intentionally signal their feelings, but the baby is not yet fully intentional. The parent-child duo behave synchronously rather than in a true give-and-take. They create a matched pair of radiant grins, one on an infant face, the other on the adult's; a chorus of purrs or coos or giggles; smiles at rocking or being rocked; whoops of delight at swinging or being swung. This exchange begins with the rapturous attention of an infatuated caregiver, which the baby glowingly returns . . .

Without some degree of this ecstatic wooing by at least one adult who adores her, a child may never know the powerful intoxication of human closeness, never abandon herself to the magnetic pull of human relationships, never see other people as full human beings like herself, capable of feeling what she feels. Whether because her nervous system is unable to sustain the sensations of early love or her caregiver is unable to convey them, such a child is at risk of becoming self-absorbed or an unfeeling, self-centered, aggressive individual who can inflict injury without qualm or remorse. [Greenspan (1997), pp. 50-51]

As indicated earlier, these willful acts form a child's first circles of communication: baby gurgles, Dad raises his eyebrows; baby smiles, Dad picks up baby, baby pats Dad. Now she aims a smile to get one back; a frown, a smirk, a gurgle, a glance, a giggle each get the recognition of a gesture in return . . . Emotions and sensations lead to richer and more differentiated dialogues as the baby learns ever more expressive and inventive ways of engaging with the world. Twenty, thirty, even forty circles of communication routinely link up now as pats, waves, smiles, winks, laughs, squeaks, jiggles, and frowns multiply into long gestural conversations that tie the baby to those around her. [*ibid*., pg. 58]

This pattern can be seen vividly in infancy. In a well-known study of infants at four months of age, mothers of healthy babies were asked to forego their customary smiles, nods, and affectionate coos and show only blank, expressionless stares. The babies followed a predictable pattern in response, first smiling, cooing, and reaching with more and more intensity, as if to say, "Hey, pay attention! I'm talking to you!" When that failed, they paused momentarily, then tried again, more frantically. In a few minutes they had become irritable and frenetic, their gestures disorganized and increasingly purposeless. At last apathy and disinterest set in and they gave up. [*ibid*., pg. 56]

Greenspan is a good deal less detailed, and considerably warmer if less coldly objective, than Piaget in reporting observations, but his excellent record of impressive achievement in treating extremely severe cases of autism testifies to his expertise. Piaget would probably split hairs with Greenspan on some of the latter's interpretations of what might *objectively* be going on in the minds of the children, but not one word Piaget has written indicates he would disagree with Greenspan's overall views on what some have called the development of the child's emotional intelligence[24].

It is also worth noting that many of Greenspan's patients were children who had rather severe neurological pathologies underlying their autism, and that Greenspan's psychiatric techniques were remarkably effective at overcoming the autism despite the organic pathology. *Nous* and *soma* coexist in an unbroken and thorough-going relationship of reciprocity. Affect one of these logical divisions of organized being and you affect the other as well. The baby is not so asocial as Piaget thought, yet not so social as Greenspan seems to think. As a scientific term, "social" is a

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[23] of affective development, which Greenspan calls the "level of intimacy and relating."

[24] In point of fact, Piaget did not conduct extensive research into the affectivity side of child psychology. Every one of his books makes unmistakable and important references to affective factors, but, curiously, he did not do much follow-up-in-depth on the topic of affectivity. His ideas in this arena appear only in one little book, Piaget (1954). This is something for which he has been criticized. In regard to moral judgment, his later views [Piaget & Inhelder (1969)] do not differ at all from the theory he first presented in 1932.

word to use with care and caution and *never* as a scientific primitive.

Now let us turn to Piaget's motor rules. One of his principal findings is that, in the infant, innate sensorimotor reflexes (and, *I* will add, innate *affective* reflexes or "preferences") develop into the infant's first acquired habits. These habits are expressions of motor rule maxims.

> In its beginnings the motor rule merges into habit. During the first few months of an infant's life, its manner of taking the breast, of laying its head on the pillow, etc., becomes crystallized into imperative habits. . . . But not every habit will give rise to the knowledge of a rule[25]. The habit must first be frustrated, and the ensuing conflict must lead to an active search for the habitual. Above all, the particular succession must be perceived as regular, i.e., there must be a judgment or consciousness of regularity . . . The motor rule is therefore the result of a feeling of repetition which arises out of ritualization of schemes of motor adaptation. The primitive rules of the game of marbles (throwing the marbles, heaping them, burying them, etc.) which we observed towards the age of 2-3 are nothing else. The behavior in question starts from a desire for a form of exercise which takes account of the particular object that is being handled. The child begins by incorporating the marbles into one or the other of the schemes of assimilation already known to him, such as making a nest, hiding under earth, etc. Then he adapts these schemes to the nature of the object . . . This mixture of assimilation to earlier schemes and adaptation to the actual conditions of the situation is what defines motor intelligence. But – and this is where rules come into existence – as soon as a balance is established between adaptation[26] and assimilation, the course of conduct adopted becomes crystallized and ritualized. New schemes are even established, which the child looks for and retains with care, as though they were obligatory or charged with efficacy.

> But is this early behavior accompanied by consciousness of obligation or a feeling of the necessity of the rule? We do not think so. Without the feeling of regularity which goes to the formation of any intelligence and already so clearly characterizes motor intelligence, the consciousness of obligation would no doubt never make its appearance. But there is more in this consciousness of obligation than a mere perception of regularity [Piaget (1932), pp. 87-88].

Piaget held that this something-more in obligation is "a feeling of respect and authority." He based this on the works of Durkheim and of Bovet which "have clearly shown [this feeling] could not come from the individual alone" [*ibid*.]. We're going to see later that although it is true that "respect" (specifically, Critical Self-respect) is an essential feature of obligation, it is wholly false to regard obligation as something that is *externally* imposable. What we will also see is that Piaget's "feeling of regularity" idea is not quite correct. What he calls the "feeling of regularity" is instead an *absence* of feeling, specifically, a state in which the feelings of *Lust* and *Unlust* are mutually negated. This is *the affective condition* of congruence with the categorical imperative of pure practical Reason and the perceptual mark of equilibrium.

Mental physics calls this the closure of a stable cycle of affective interaction in sensorimotor perception. Figure 5.3 illustrates this cycle. In an infant these cycles tend to be temporally brief in duration and markedly repetitious. In an adult, stable cycles can and do become very extended in duration and it becomes increasingly difficult to observe their underlying cyclic character. If you have a "morning routine," think of what goes into it and note how regular it is.

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[25] that is, the *conceptualized* knowledge of a rule; from the practical Standpoint of Critical epistemology, a habit is learned and is represented in the manifold of rules. This, too, is a form of knowledge.

[26] Piaget technically misspeaks here. To be consistent with his general theory as it eventually came to be, he should have said "a balance between accommodation and assimilation." However, his term "accommodation" was one he did not technically coin and begin using regularly until somewhat later than 1932. Until then, he tended to use accommodation and adaptation interchangeably.
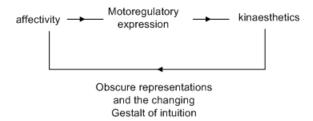
Figure 5.3: The cycle of affective interaction in sensorimotor perception.

You might also note how you react if something *disrupts* your routine. Freud called the feeling that accompanies such a disruption a "tension." Piaget calls it a "disturbance." Both terms amount to the same thing in Critical epistemology, namely, a feeling of *Lust* or *Unlust* that marks loss of the condition of equilibrium. This is what Piaget refers to above when he writes of the habit being "frustrated." Any act of conceptualization that follows a "frustration" is a product of a subsequent act of ratio-expression, initiated in practical appetition, aimed at restoring equilibrium.

The re-staging of motor rules as the person grows older can and does come to form highly complicated major cycles with numerous minor cycles embedded in them. Imagine, if you will, a man who rises on a weekday morning, goes through a more or less predictable and fixed morning routine, invariably announces to his wife, "Well, I'm off to do battle with the corporate gnomes!" drives to work, does whatever it is he does there, and then returns home in the evening and settles into an "evening routine" as more or less predictable and fixed as his morning one. The next day, assuming it is not Saturday, he will do the same thing again and the day-to-day specific variations he encounters amount to little more than ripples in a very long cycle.

Now extend this pattern to a typical 7-day week. Now extend it to a month. The way a person re-stages "routines" into "bigger" routines is how the typical well-adapted and contented individual spends most of his adult life, and its very predictability and regularity is an important affective source of this contentment. I have yet to meet another person past the age of forty who does not agree that "the older I get the faster the years go by" or who disagrees, rather than nods nostalgically, if I say, "When I was a boy, a summer day lasted forever." Children have a great deal more structuring to undertake than do adults, encounter more novelty, and have far fewer developed schemes and habits to promote patience. Humorist Bill Bryson wryly noted,

> One of the great myths of life is that childhood passes quickly. In fact, because time moves more slowly in Kid World – five times more slowly in a classroom on a hot afternoon, eight times more slowly on any car journey of more than five miles (rising to eighty-six times more slowly when driving across Nebraska or Pennsylvania lengthwise), and so slowly during the last week before birthdays, Christmases, and summer vacations as to be functionally immeasurable – it goes on for decades when measured in adult terms. It is adult life that is over in a twinkling. [Bryson (2006), pg. 29]

Very few motor rules are endowed with commonplace moral significance, although a person's reaction to disturbances of his rules-of-routine can take on an intensity rivaling that of a circuit court judge if one of the lawyers starts eating popcorn while court is in session. This is somewhat less true of rules-of-cooperation:

> We have, in connection with the actual facts examined, pointed to the obvious correlation between cooperation and the consciousness of autonomy. From the moment that children really begin to submit to rules and to apply them in a genuine spirit of cooperation, they acquire a new conception of these rules. Rules become something that can be changed if it is agreed that they should be, for the truth of a rule does not rest on tradition but on mutual

agreement and reciprocity. . . . Now, in so far as constraint is replaced by cooperation, the child dissociates his ego from the thought of other people. For as the child grows up, the prestige of older children diminishes, he can discuss matters more and more as an equal and has increasing opportunities . . . of freely contrasting his point of view with that of others. Henceforward, he will not only discover the boundaries that separate his self from the other person, but will learn to understand the other person and be understood by him. So that cooperation is really a factor in the creation of personality, if by personality we mean, not the unconscious self of childish egocentrism, nor the anarchical self of egoism in general, but the self that takes up its stand on the norms of reciprocity and objective discussion, and knows how to submit to these in order to make itself respected. Personality is thus the opposite of the ego . . . Cooperation being the source of personality, rules cease, in accordance with the same principle, to be external. They become both the constituted factors of personality and its fruit, in accordance with the circular process so frequently exemplified in the course of mental development. In this way autonomy succeeds heteronomy. . . .

Mutual respect is, in a sense, the state of equilibrium towards which unilateral respect is tending when the differences between child and adult, younger and older, are becoming effaced, just as cooperation is the form of equilibrium to which constraint is tending in the same circumstances. . . . The great difference between constraint and cooperation or between unilateral respect and mutual respect, is that the first imposes beliefs and rules that are ready made and to be accepted *en bloc*, while the second only suggest a method – a method of verification and reciprocal control in the intellectual field, of justification and discussion in the domain of morals. It matters little whether this method be applied immediately to all the rules imposed by the environment or only to one aspect of behavior: once it has come into existence it has the right to be applied to everything. [Piaget (1932), pp. 95-97]

It is unlikely that most psychologists would agree with Piaget's definition of "personality" we see here. The likelihood is perhaps a bit better if it is qualified by calling it "moral personality." Reber tells us,

personality One of the classic 'chapter heading' words in psychology. That is, a term so resistant to definition and so broad in usage that no coherent simple statement about it can be made . . . [Reber & Reber (2001)]

In any case, this Piagetian concept of "personality" is not that of Critical epistemology and we will not be troubling ourselves to discuss it further. What is pertinent here is the circumstance of discussion, give-and-take, and, above all, mutual agreement that is the logical essence of Piaget's cooperation stage. Of equal standing is his observation that the child, in reaching this stage, is able to shed his presupposition that everyone else thinks, feels, and perceives things precisely as he does. A better term for this, and one that Piaget came to use in later years, is "de-centrism."

Even so, what is there to be called "moral" in judgments leading to actions that exhibit cooperation? Here Piaget's theory is regrettably vague and tends to leave the impression that because cooperation is both understood and willingly undertaken by cooperating individuals, this is in some way reflective of what is "moral" in mores and folkways. Piaget pins the grounding of this on his notion of "mutual respect." This is not Critically adequate or satisfactory. I need not respect or fear the members of the town council in the least in order to obey a new speed limit, although I probably will regard *your* violation of it as being, in some way or other, an immoral act unless everyone (or almost everyone) in town spontaneously ignores it.

Piaget tends to speak of the egocentrism stage and its associated moral realism as a kind of passage from motor rules and individualism to cooperation and rule cognizance. In point of fact, it is far more common for the exhibitions of moral realism to bear closer resemblance to what

most people call "moral outrage" than is the case when an action exhibits lack of cooperation. The notions of unilateral respect, constraint, and mutual respect do not really do the job of putting together an objectively valid theory free of elements of ontology-centered fiat. This is something we will deal with in this treatise, and the Critical answer will be set out. For now, however, what we can usefully take from this chapter is the behavioral classifications of types of rules, which do reflect Piaget's abilities as a naturalist, and the exemplars of what sort of exhibited behaviors go with the terms in figure 5.1.

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