

Violence among peoples in the light of human frustration and aggression[☆]

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Abstract

This article sets out to provide a general background to the study of aggression in the social sciences, with a particular focus on its link to collective violence. While the study of what happens in the human brain appears to be already highly complex, analysis of violent behavior appears to be even more intricate. A deductive system in the sense of a general and clear system of propositions logically connected to one another is not feasible, principally because contrary to the natural sciences there are no verities but merely “stylized facts.” One of these concerns the setting of human aggression in the light of frustration, as argued in the frustration–aggression hypothesis developed by Dollard et al. in 1939. Apart from conceiving of aggression as a pure human instinct, it may also be seen as externally driven, while a third possibility concerns culturally “learned” aggression. Proof of the latter is that the strongest correlation appears to be that between current violence and previous manifestations thereof. Attention is paid to the way in which Gurr has rooted his relative deprivation theory on causes of collective violence among peoples in mechanisms of frustration and aggression. That theory is taken a bit further in terms of “perceived acquirement failure,” which appears to be highly connected to the role of the state. Based on certain observations by Hannah Arendt, the argument then proceeds to violence as a manifestation of powerlessness. Finally, this leads to a discussion of justice as a crucial factor in what Durkheim used to call a “right to conflict.” In this way, human aggression is placed in a broad socio-economic context.

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Some 7 years ago, *Dædalus*, journal of the American Academy of Arts and Sciences, devoted its Spring issue entirely to the brain. This event was seen, the preface asserts, as a celebration of an incontestable achievement: “the extraordinary progress made ... in the study of that most complex of all organs, the brain.” In the final paper of the issue, with a title that must have attracted the attention of many social scientists in the first place, *Where Brain, Body and World Collide*, Andy Clark informs us of what precisely our brain has accomplished when we finish an academic paper:

The brain supported some rereading of old texts, materials and notes. While rereading these, it responded by generating a few fragmentary ideas and criticisms. These ideas and criticisms were then stored as more marks on paper, in

margins, on computer disks, or some other recording means. The brain then played a role in reorganizing this data on clean sheets, adding new on-line reactions and ideas. The cycle of reading, responding and external reorganization is repeated, again and again. Finally, there is a product—a story, argument, or theory. (Clark, 1998, 271).

When I read that text I had an association that I considered as being relevant for the current paper, but I did not note it down. While continuing reading Clark’s text, it suddenly occurred to me that I had forgotten my connected quotation. Then I reread these same sentences and it came back: an observation by Hedley Bull (1977) in his work on anarchy and order in the world of nation–states. Strikingly, he states:

The world is infinitely more complex than our arguments.

Interesting, first of all, this way of recovering memory: apparently our brain associates in an ordered manner. Indeed,

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most of us who are already a bit older know that when one has forgotten something—a name, for example; the way to recover that knowledge is to first put the query out of your mind and then back again, in conjunction with an associated context. There is, in other words, no matter all the impressive research neuroscientists are performing, some common sense comprehension of our brain in action. But let me resist any temptation towards a further delving into my own neuroscientific common sense and turn back to Andy Clark:

But this intellectual product [our academic paper] owes a lot to those repeated loops into the environment. Credit belongs to the agent-in-the-world. The biological brain is just a part (albeit a crucial and special part) of a spatially and temporally extended process, involving lots of extraneural operations, whose joint action creates the intellectual product. There is thus a real sense ... in which the notion of the “problem-solving engine” is really the notion of the *whole caboodle*, the brain and body operating within an environmental setting. (1998, 271–272).

The context of this reference to the outer world is rather simple: writing an academic paper. Violence as a manifestation of frustration-induced aggression is infinitely more complex, if alone because there is an element of incomprehensibility there: consider, for example, the way in which during the Rwandan genocide otherwise “normal” men and women were killing their neighbors, including old-aged as well as babies. This is, indeed, one reason why in the social sciences we can never aim at Isaiah Berlin’s ideal of all natural science: “a system of propositions so general, so clear, so comprehensive, connected with each other by logical links so unambiguous and direct that the result resembles as closely as possible a deductive system, where one can travel along wholly reliable routes from any point on the system to any other (Berlin, 1997, 21).” “No one imagines that neuroscience yet constitutes such a system”, Vernon Mountcastle comments, “but the advances of the last half-century in methods and concepts, and the accumulation of facts about the brain and how it controls behavior, have brought many general principles into the field of play. One can perceive, even if dimly, such a system of propositions—‘so general, so clear’—that characterize the present state of brain science (Mountcastle, 1998, 2).”

Yet, this Professor Emeritus of Neuroscience also notes “a large explanatory gap between the processes of brain and the processes of mind they produce. (Mountcastle, 1998, 1).” Consciousness, then, appears to be the keyword on his research agenda, and he suggests seeking an explanation for one of the simpler levels of consciousness first. Well, indeed, when it comes to phenomena like aggression and addiction certain limits to the construction of clear and general deductive models evidently manifest themselves. Let me take a parable from the work of Immanuel Kant to which Susan Neiman drew our attention in her recent Thomas More lecture. A man asserts that every time he passes a house of a certain reputation he is overwhelmed by the temptation to enter it in order to find his relief. Actually, he may well be aware of a certain normative setting in which human decency and faithfulness score rather

highly, but he simply has to bow to his immediate inclinations. A sex addict, we might call him today. But now imagine, Kant adds, that in front of such brothels huge gallows are erected on which the visitors are hanged as soon as they leave those premises. Would our friend still be unable to resist his temptations? Of course not, apparently there is an outer world that exerts an undeniable influence on the inner world of brain, mind, consciousness and behavior. It is that outer world from which both so-called houses of pleasure and gallows are constructed.

Allow me a side-remark here, concerning neuropharmacology in general. There is abundant empirical research that demonstrates subduing effects of certain medical drugs in respect to addiction and/or aggression, presumably by softening fear as a driving force. It is, particularly, in an evident genetic background, that such medicine is considered as being of primary importance in efforts to affect human behavior in a beneficial manner, both from the individual’s perspective and from a social angle. There may, however, be individual factors at stake, too, which would induce psycho-therapeutic treatment as well, as Bronwen de Gaay Fortman (my daughter who works as a psycho-therapist in Deventer, The Netherlands) observed when I discussed the theme of this colloquium with her. Clearly, however, the incomprehensible events in situations of genocide fall beyond any pharmacological perception.

In international law we speak of *crimes against humanity*. Apparently, however, acts which from a normative angle are regarded as inhuman are, nevertheless, committed by human beings. As such they fall within the research mission of the social sciences, as both objectum quod—the empirical object of our studies—and objectum quo, the core perspective that we take. Let me take the first one first. Contrary to the natural sciences, in the social sciences we have to accept the lack of real facts that would have allowed us to establish undeniable truths like determining water as H₂O. The collective violence observed in Sudan is distinct from that in Iraq, or in Bolivia or wherever. What we can establish is merely “stylized facts” in the sense that violent conflict as a stylized phenomenon tends to occur in a definite setting, characterized, for instance, by extreme pressure on resources, huge socio-economic inequalities, and/or lack of a social contract. The latter term may serve to further illustrate a general lack of precision in social, political and economic sciences: what lack of a social contract refers to is a certain deficiency in state–citizen relations.

Indeed, our human race is confronted with violent behavior, not merely at an individual level but among peoples, too. While the latter may take wholly incomprehensible expressions, we also note certain identifiable empirical settings in which it tends to occur. There is one economist in particular who has taken socio-psychological theory as a starting point for analyses in this respect: Theodore Robert Gurr (1970). *Why Men Rebel*, his magnum opus, is based on the frustration–aggression hypothesis that Dollard, Doob, Miller, Mowrer and Sears presented in a monograph written in 1939. Gurr argued that collective frustration, lying at the roots of collective violence as it does, arises from relative deprivation, meaning a noticeable discrepancy

between “value expectations” in the sense of the goods and conditions of life to which people believe they are entitled, and their “value capacities” signifying the goods and conditions they think they are capable of getting and keeping. The foundation of his theory, then, is that the potential for collective violence varies strongly with the intensity and scope of relative deprivation (Gurr, 1970, 24; Dugan, 2003).

Now before going any further into Gurr’s relative deprivation theory and moving from there to issues of violence and (in) justice, let us first try to understand the frustration–aggression hypothesis. It consists of a twofold assertion: (1) “the occurrence of aggressive behavior always presupposes the existence of frustration,” and (2) “existence of frustration always leads to some form of aggression (Dollard et al., 1939, 8).” While (1) is still generally accepted, (2) is no longer seen as a valid assumption. In order to understand this, we have to look first at the concepts themselves.

Aggression is a form of behavior, intended to cause harm to those towards whom it is directed. Behind it, the hypothesis states, is a state of mind characterized by dissatisfaction with goals that were not achieved, “an interference with the occurrence of instigated goal-response at its proper time in the behavioral sequence” in the learned terminology of Dollard cum suis (Dollard et al., 1939, 7). It is the malcontent with that interference which drives, as Lorentz has put it rather bluntly, “the fighting instinct in beast and man which is directed against members of the same species” (Lorentz, 1966, 20).

Obviously, here we find ourselves at the interface of brain, mind and consciousness on the one hand—the inner engine—with structural factors behind violence among peoples on the other hand—the outer engine. This is, above all, the realm of those who study human behavior as a matter of instincts and drives, the dominion of psychologists, in other words. It was Freud who proposed to approach aggression as a major instinct derived from what he calls *Thanatos*, the innate drive directed against the self. As *Eros*, the other major drive, which happens to direct us towards life, usually wins, we turn our aggression outward. Through what Freud calls *catharsis*—acting as observers to violence, for example, or finding an outlet in the milder displays of anger—the aggressive urge may be diminished in emotionally purified and calmed states of mind (Dugan, 2003; Campbell, 1993). In such ways, endless violence among human beings is being avoided.

Yet, while those who regard aggression as basically a matter of nature tend to ascribe a cathartic effect to the milder expressions of the instinct, empirical research does not substantiate that premise, as Dugan has noted. Apparently, couples who quarrel most are also the most likely ones to engage into physical violence, and “the best predictor of an individual’s likelihood of criminal violence this year is his criminal violence last year (Dugan, 2003, 2). Notably, this observation corresponds fully with the positive correlation between civil war in the past and today. Thus, past outbreaks of collective violence between Serbs and Croats, to mention just one specific example, have not taught those peoples a lesson in peace-making but rather created a breeding ground for continuing acts of aggression against one another.

Fortunately, however, the issue is not just one of purified human nature or otherwise. In fact, beside those who regard aggression basically as a matter of instinct, there are two other schools of thought in respect to aggression: those who see it as externally stimulated, and those who focus on learned aggression. Naturally, other disciplines come to the fore here (Dugan, 2003, 1). Indeed, the frustration–aggression hypothesis is induced, as co-author Neal Miller (1941) commented 2 years after publication of the study launching it, from common-sense observation, from clinical case studies, from a few experimental investigations, from sociological studies and from the results of anthropological field work. Not surprisingly, then, Miller himself already qualified the assertion that the existence of frustration always leads to some form of aggression as

unfortunate from two points of view. In the first place it suggests, though it by no means logically demands, that frustration has no consequences other than aggression. ... A second objection to the assertion in question is that it fails to distinguish between instigation to aggression and the actual occurrence of aggression (p. 337).

The latter point was taken up by Berkowitz. He argues that “every frustration increases the instigation to aggression, but this *instigation* is here termed anger (Berkowitz, 1980, 136).” Anger, in this view, results in aggression only when “there are appropriate cues or releasers (p. 122)”. The point is that between frustration-induced anger and aggression, another variable appears to play its part: interpretation of one’s malcontent in terms of actual response. Let me try to clarify this rather abstract language with a concrete example. I bought a train ticket the other day without mentioning my general entitlement to a discount. When I heard the price of the ticket mentioned, my brain recalls, there was a signal “too high.” Why I did not react to that signal may be explained by my hurry to catch a train. Having taken my seat in that train I immediately realized my mistake, looked at my ticket and thought “Why didn’t that person behind the counter ask me whether I was entitled to a discount, as these people usually do, and given the quite common possession of discount cards rightly so.” Frustration, in other words, and here directed to the woman who had sold me the ticket. If I had still been at the ticket office and that person had refused to exchange my ticket for one with the appropriate discount, my frustration might well have been converted into some verbal aggression. But sitting in that train, and knowing nothing could be changed anymore, I turned towards my own person, telling myself that this was a lesson that I should never forget: Whenever buying a railway ticket, always pronounce the words “with discount” first. This, indeed, conforms to Berkowitz’s point that individuals may learn to respond to frustration and anger in non-aggressive ways.

Obviously, alternative ways of handling malcontent may well be learned through experience as well as transference of recipes and values by those exerting an influence on the continuous processes of personality formation. It is not just nature, but nurture, too, that plays a role here, in other words. Thus, while the emphasis in human aggression may, indeed, lie in external stimuli, people may also discover more creative ways

of handling their dissatisfaction than just aggressive response. Conversely, aggression, too, may be learned behavior, as Erich Fromm (1973), for one, has concluded from studies of so-called primitive societies. In societies with similar external indicators, some were “characterized by much interpersonal violence, destructiveness, aggression and cruelty” while the majority are to be seen as life-affirmative societies in which “there is a minimum of hostility, violence or cruelty among people, no harsh treatment, hardly any crime, and the institution of war is absent or plays an exceedingly small role” (p. 17). This would, indeed, provide an explanation of the already mentioned correlation between violent conflict in the past and civil war today: those peoples have learned to respond aggressively to feelings of frustration and anger.

Evidently, the three approaches must be seen as not so much distinct schools of thought but rather as different perspectives. Frustration-driven aggression, in other words, is a matter of nature (instinct), nurture (external stimuli), and culture (learned aggression but also learned ways to handle it). But enough now on frustration–aggression analysis; let us turn to violence as its outlet, with collective violence as our specific focus. The issue

to which Gurr (1970) has called our attention, as we saw already, concerns perceived discrepancies between people’s value expectations and their value capacities. This leads him to the hypothesis that the potential for collective violence varies strongly with the intensity and scope of relative deprivation among members of a collectivity. In my own work, I have focused this type of analysis on two core notions: *perception* and *entitlement*. A figure may serve to illustrate the various factors behind a general failure of people to acquire their daily livelihoods, perceived as being their due.

Fig. 1 shows how people’s failure to acquire their necessities is rooted in a capacity to undertake certain activities on the one hand and their socio-legal position on the other (cf. de Gaay Fortman, 1999).

Here one dominant factor strikes me as decisive in gaining further insight into the context in which people turn to collective violence: the role of the state as a basis for both a well-functioning economy and to achieve distributive justice. But at this point, let us just go a little deeper into the nature of violence.

Reflections on Violence is the title of Hannah Arendt’s beautiful essay in the New York Review of Books, published

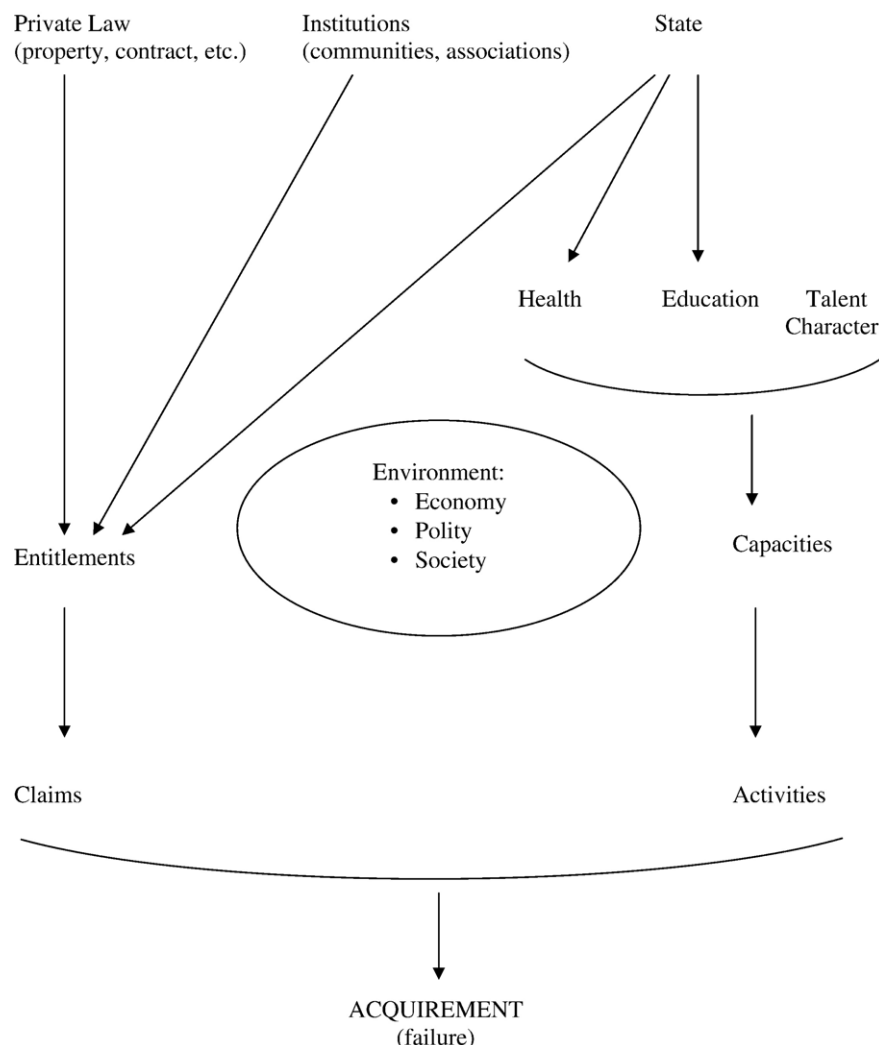


Fig. 1. Acquirement failure.

as a supplement in 1969, just after the student revolts in Europe and the United States and the accompanying glorification of violence by influential authors as Jean Paul Sartre. Basing himself on the strength of Franz Fanon's *The Wretched of the Earth* (1961), he had asserted his belief that violence, "like Achilles' lance, can heal the wounds that it has inflicted (quoted by Arendt, 1969, 22)." "If this were true", Arendt comments, "revenge would be the cure—all for most of our ills", and she continues:

This myth is more abstract, further removed from reality than Sorel's myth of a general strike ever was. It is on par with Fanon's worst rhetorical excesses, such as 'Hunger with dignity is preferable to bread eaten in slavery'. No history and no theory are needed to refute this statement; the most superficial observer of the processes in the human body knows its untruth. But had he said that bread eaten with dignity is preferable to cake eaten in slavery, the rhetorical point would have been lost (p.3).

Well, I should add, if the nonsense of such statements on hunger is assumed to be clear already to the most superficial observers of the processes in the human body, the more this would apply to the most sophisticated observers of the human brain. Actually, Arendt considers the glorification of violence as motivated by a deep hatred for bourgeois society. Its most dangerously attractive features come to the fore in collective violence, based as that is on a kind of group coherence, a collective practice of violence, which, as Fanon has put it, "binds men together as a whole, since each individual forms a violent link in the great chain, a part of the great organism of violence which has surged upward" (p.22).

Actually, Hannah Arendt has a lot more to tell us, strongly objecting, as she does, to the qualification of violence as the essence of government:

Power is indeed of the essence of all government, but violence is not. Violence is by nature instrumental; like all means, it always stands in need of guidance and justification through the end it pursues. And what needs justification through something else cannot be the essence of anything. The end of war is peace; but to the question, And what is the end of peace?, there is no answer. Peace is an absolute, even though in recorded history the periods of warfare have nearly always outlasted the periods of peace. Power is in the same category; it is, as the saying goes, "an end in itself (p.14)."

Arendt is referring here to power formation, inherent as that is to the very existence of political communities: power "springs up whenever people get together and act in concert, but it derives its legitimacy from the initial getting together rather than from any action that may follow." But whereas the initial social contract may continue to legitimate, violence needs continuous justification in the present. An example of such an immediately legitimating cause is self-defense "because the danger is not only clear but present, and the end to justify the means is immediate" (p.14).

It is true, however, that violence can defeat power but only at a high price:

Nowhere is the self-defeating factor in the victory of violence over power more evident than in the use of terror for purposes of maintaining domination...terror is not the same as violence; it is rather the form of government that comes into being when violence, having destroyed all power, does not abdicate but, on the contrary, remains in full control (Arendt, 1969, 20).

Notably, then, the opposite of violence is not non-violence but power: Power and violence are opposites; where the one rules absolutely, the other is absent. Indeed, violence never springs from power but it often springs from rage, the *mad fury* as a collective instinct that Sartre had referred to and that had expressed itself in the slave revolts and the rebellions of the oppressed. Yet, Arendt comments,

rage is by no means an automatic reaction to misery and suffering as such; no one reacts with rage to a disease beyond the powers of medicine or to an earthquake or, for that matter, to social conditions which seem to be unchangeable. Only when there is reason to suspect that conditions could be changed and are not, does rage arise. Only when our sense of justice is offended do we react with rage. ... The point is that under certain circumstances violence, which is to act without argument or speech and without reckoning with consequences, is the only possibility of setting the scales of justice right again. (Billy Budd striking dead the man who bore false witness against him is the classic example.) In this sense, rage and the violence that sometimes, not always, goes with it belong to the "natural" emotions, and to cure man of them would mean nothing less than to dehumanize or emasculate them (p.20).

This enlightening discourse brings us to our final focus: the scales of justice. Based on his practical experience in peace building, John Paul Lederach of the Conflict Transformation Program in the United States speaks of a *justice gap* (Lederach, 1999). This is the result of inadequate efforts to develop a peace-building framework that not only reduces direct violence but also produces social and economic justice. The point is that in all situations of violent conflict, there are original injustices that lie at the roots of it. The main reason why hostilities can be stopped in the end is that those involved realize that the violence of the war is even worse than the original injustices. But at the same time, they will expect these original injustices to be dealt with after the cessation of hostilities. Expectations are raised that life will not be as it used to be but that there will be an improvement, a public path towards justice. Notably, justice has very much to do with the outcome of the use of power, and hence, with daily livelihoods, with people's needs and the recognition of these. The *root conflict*, in Johan Galtung's terminology (1998), has to be addressed.

Justice is both normative and compelling: it refers to what is right from such a perspective and to such an extent that it ought to be enforced. It is often seen as an ideal, a set of values that

provide direction to public policies, for example. But in the context of our argument today what I should like to draw your attention to is justice as a human need. Let me begin with a simple example from the work of Edward Schillebeeckx, a famous systematic theologian. Imagine three persons, an officer, a soldier and an innocent citizen. The officer orders the soldier to execute the citizen. The latter refuses. “Well”, the officer responds, “in that case I’ll kill him myself and you as well”. From a rational choice perspective the issue is clear: one innocent death vs. two. Yet, most of us would hope that in the role of the soldier, we shall find the courage to refuse.

To my students, I present this case in order to introduce a debate on ethics and values: mentality or attitude ethics vs. teleological (goal-oriented) ethics. However, Susan Neiman’s recent Thomas More lecture enlightened me in two ways. First, it became clear that actually that fictitious case comes from Kant, in fact an extension to the case of the addicted visitor of brothels. Now, the same man is confronted with the gallows as a sanction to an act of justice rather than to his own indecent behavior. Then, of course, his response is no longer that evident. But more importantly, Neiman uses the example to show that justice is a human need, indeed one of a primary or basic character. Justice as a basic need; that would seem to be a factor generally ignored in dealing with human frustration and aggressive instincts.

There is a related perspective that I regard as relevant in our context: justice as a functional necessity, again instead of its role as an ideal. I am referring here to Durkheim’s work of more than a century ago on *The Division of Labor in Society* (1893). Recently, Anne Rawls (2003) has thrown some new light on his thinking. Indeed, rather than just advocating socio-political consensus as opposed to the Marxian focus on conflict arising from inner contradictions in society, Durkheim appears to emphasize conflict as a foundation for consensus. Thus, in an advanced society, i.e., one that is based on specialization in production and a modern division of labor, justice is the foundation of what keeps the public-political community together. Highly topical in the setting of our investigations into violence in the light of human frustration and aggression is his view

that persons in a division of labor society have the right not only to conflict, but to combat, in order to preserve their interests... If the right of combat is restricted in the interests of consensus, and conflict eliminated through force, then, according to Durkheim, the society will fall into a state of constraint that violates the prerequisites for solidarity in the division of labor, creating a deep internal contradiction and endangering its survival.

What is necessary is that through exercise of the *right to conflict* [my italics], and participation in self-regulated practice, members of society achieve, from moment to moment, the consensus that they need to go on (Rawls, 2003, 298).

That right to conflict, I should add, might be conceived as an abstract acknowledgement of one’s essential interests. Recogni-

tion and protection of fundamental interests is the key term, or, in other words, *human rights*. Hence, where basic mechanisms for the realization of human rights have not been established, people’s right of combat would be activated. Notably, this is quite distinct from a “right to violence.” Evidently, there can be no such right as the cause of protecting human dignity excludes an entitlement to the use of force. Indeed, the distinction between conflict and violence is quite fundamental.

What, then, are the implications for our current theme? Well, justice as a basic need, and a right to conflict that would be made active through negligence of essential interests, implies a context of human frustration and aggression that has certain normative features. Hence, whether addiction and aggression should be suppressed by means of medicine is not a predetermined issue. Indeed, neuroscientists, too, may perceive of people as individuals in a social context that triggers Durkheim’s right to conflict.

I conclude. Hopefully, when listening to this exercise in generalization, your brain has made all sorts of creative associations. It may also have confronted you with both existing and new puzzles, including normative contradictions such as the “pro-life” killers who wish to destroy the lives of those running abortion clinics. What happens in the brains of people with tunnel visions, how do they manage to “protect” themselves from the associations that other people would “normally” have? Are tunnel visions just a matter for psychologists and psychiatrists, or would they have a place on the research agenda of neuroscientists as well? Numerous questions come to our mind, but no matter all such neuroscientific associations, the major association in my brain remains the appeal to academic modesty that resounds in those words of Hedley Bull:

The world is infinitely more complex than our arguments.

References

- Arendt, H., 1969. A special supplement: reflections on violence. N. Y. Rev. Books 12.
- Berkowitz, L., 1980. The frustration–aggression hypothesis. In: Falk, R.A., Kim, S.S. (Eds.), *The War System: an Interdisciplinary Approach*. Westview Press, Boulder, CO.
- Berlin, I., 1997. *The Sense of Reality: Studies in Ideas and their History*. Farrar, Straus, and Giroux, New York, NY.
- Bull, H., 1977. *The Anarchical Society*. Columbia University Press, New York, NY.
- Campbell, A., 1993. *Men, Women, and Aggression*. Basic Books, New York, NY.
- Clark, A., 1998. Where brain, body, and world collide. *Daedalus* 127, 257–280.
- de Gaay Fortman, B., 1999. Beyond income distribution. An entitlement systems approach to the acquirement problem. In: van der Linden, J., et al. (Eds.), *The Economics of Income Distribution: Heterodox Approaches*. Edward Elgar, Cheltenham, UK.
- Dollard, J., Doob, L.W., Miller, N.E., Mowrer, O.H., Sears, R.R., 1939. *Frustration and Aggression*. Yale University Press, New Haven, CT.
- Dugan, M., 2003. Aggression. [article online]. Accessed 7 June 2005. Available from: <http://www.beyondintractability.org/m/aggression.jsp>. Internet.
- Fromm, E., 1973. *The Anatomy of Human Destructiveness*. Fawcett Crest, Greenwich, CT.
- Galtung, J., 1998. Conflict transformation by peaceful means, (the transcend method). [manual prepared by The Disaster Management Training Program of the United Nations] New York, NY.

- Gurr, T.R., 1970. *Why Men Rebel*. Princeton University Press, Princeton, NY.
- Lederach, J.P., 1999. Justpeace—the challenge of the 21st century. *People Building Peace*. 35 Inspiring Stories from Around the World. European Centre for Conflict Prevention, Utrecht, The Netherlands.
- Lorentz, K., 1966. *On Aggression*. Harcourt, Brace, and World, New York, NY.
- Miller, N.E., 1941. The frustration–aggression hypothesis [1]. *Psychol. Rev.* 48, 337–342.
- Mountcastle, V., 1998. Brain science at the century’s ebb. *Daedalus* 127, 1–36.
- Rawls, Anne, 2003. Conflict as a foundation for consensus: contradictions of industrial capitalism in book III of Durkheim’s division of labor. *Crit. Soc.* 29, 295–335.