



Aggression's Typologies

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Abstract

Far from being a term associated with a single type of behavior, aggression is a multifaceted concept, encompassing a multitude of behaviors with different functions and antecedents. Although not all forms of aggression are contemplated in this paper, our purpose is to provide a short summary of much of the research that attempts to distinguish among different kinds of animal and human aggression. We conclude suggesting the need for a new empirical model to be used as a typology of human aggression.

Résumé

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Although the word 'aggression' is both recognized and understood in the common usage of the term (Duncan & Hobson, 1977), it is used so broadly that it becomes virtually impossible to formulate a single and comprehensive definition. In spite of the enormous literature on the topic, and the continuous effort shown by many scholars dedicated to studying aggression scientifically, there is much disagreement about its precise meaning and causes, with no singular or even preferred definition. The fact is that aggression is often ill defined, and the best contribution of most of the proposed definitions has been as a critique of those proposed by others. Part of the task of understanding this concept would, therefore, be in clarifying its meaning.

Far from being a term describing a singular dimension, 'aggression' consists of several phenomena which may be similar in appearance but have separate genetic and neural control mechanisms, show diverse phenomenological manifestations, have different functions and antecedents, and are instigated by different external circumstances (see, among others, Ramirez, 1996, 1998, 2000). Aggression is therefore an *omnibus* term with a surplus of meanings, related to different kinds of behavior subsumed under this general term of aggression. For instance, Mandel (1959), after observing 9-16 year old boys at a boarding school, listed 2,205 specific aggressive behavior types. Further, an insufficient differentiation with other similar constructs, such as violence, antisocial behavior, or delinquency, makes the task of its definition even harder. As a consequence of this lack of unidimensionality, the word 'aggression' shows a large amount of ambiguity.

Since aggression is not a unitary concept, but rather has a large variety of meanings, it is important to discern differences and similarities, along with the general principles that may apply to a variety of species. This would allow for the possibility of generalizing to human behavior. However, which definition should be chosen? The behaviorist approach would be to define aggression as a response that simply inflicts harm on others, a response that involves the noxious stimulus to another organism (Buss, 1961). Another definition stresses the intention to harm, and not simply the delivery of harm (Berkowitz, 1989; Dollar, Doob, Miller, Mowrer, & Sears, 1939; Feshbach, 1964). Should we even restrict it to that which exclusively attempts to produce physical injury. Or, on the

contrary, may we define aggression broadly meaning, as a wide spectrum of behaviors that includes all kinds of self-assertive and ambitious behavior (Daniels, Gibula, & Ochberg, 1970)?

Whenever we approach any topic, and specially when we discuss a phenomenon whose precise meaning remains unclear, the starting point has to be an agreement about a precise *working notion*: what we are looking for, what events precede it, and what kinds of consequences it is likely to have. If we don't establish a clear definition, we run the risk of talking about different phenomena, even if we call them by the same name, falling into many unnecessary potential pitfalls. This is the case with a term like 'aggression', which is difficult to define precisely. We have to get a working notion that would allow for clear operational definitions thus allowing other researchers to replicate the research. Logically, these operational definitions would depend on the specific type of research done, given the multiple disciplines involved in the complex study of such an interdisciplinary topic as aggression. We have made previous attempts to provide such definitions (Ramirez & Fernandez-Rañada, 1997, Ramirez, 2000, Reynolds & Andreu, 1999); however, even in these attempts there has not been consensus.

In addition to this conceptual problem, there is the need for a typology or typologies of aggression with enough reliability and validity to be used as a psychological construct. But difficulties inherent in defining aggression appear simple in comparison to the difficulty with establishing a classification of such an ambiguous construct. The difficulties arise from the multiple social, cultural, and professional influences concerned with the different proposed typologies of aggression. The many tentative classification systems set up by different authors over the past decades reflect a wide array of paradigms for producing aggressive behavior, and an equally wide array of its targets.

Classifications of Animal Aggression

Many classifications of aggression are focused on characteristics common to all the animal kingdom and are sometimes applied to human species even though doing so is unfounded and awkward. A classical classification from this perspective was done by Kenneth Moyer (1968), suggesting eight categories, based on an

extensive list of eliciting stimuli or environmental circumstances in which aggression may occur: *predatory, inter-male, fear-induced, irritable, sex-related, maternal, instrumental, and territorial* aggression. The last category was later discarded (Moyer, 1976) because the exact underlying biological mechanisms were too difficult to define and because of its complex context-dependent character (Ramirez, Nakaya, & Habu, 1980).

Martin Ramirez (1981, 1985) proposed another classification of animal aggression with the intention of providing a reasonable, simple and flexible way of listing the essential categories previously mentioned by other authors. Ramirez distinguished among: a) *Interspecific* aggression, b) *Intraspecific* aggression, and c) *Indiscriminate* or *reactive* aggression. Within the latter category, he included the following subtypes: *defensive* reaction, *maternal* aggression, and *irritable* aggression.

Irritable aggression can be differentiated from other categories by the diversity of the objects attacked: it may be directed towards any target, animate or inanimate. And whereas other types of aggressive behavior may be elicited by relatively specific stimuli, irritable responses may be triggered by practically any aversive stimulus, such as intense heat, hunger, and thirst; the general environment thus seems to be irrelevant to its elicitation. The epitome of this kind of aggression is usually described as *anger* or *rage* (Moyer, 1968), and clearly differs from the typical agonistic fight; unlike defensive behavior, it is not preceded by any escape attempt. When extrapolating to humans, Luigi Valzelli (1981) suggested that the expression of a 'bad temper' is a function of the extent to which a person can tolerate irritating stimuli. While the classification proposed by Ramirez (1981) provided a simple and flexible way of categorizing aggression, Shishimi (1981) criticized this attempt as being too parsimonious.

More recently, emphasis has been placed on important distinctions found between *offensive* and *defensive* aggression (Brain, 1981; Pulkkinen, 1987; Ramirez, Salas, & Portarella, 1987, 1988 a, b). Far from being just opposing ends of a continuum (Weinshenken & Siegel, 2002), they are separate entities, each with different situational determinants, emotional and motivational states, behavioral patterns, with specific wound sites, functions, and even specific neuroanatomical and neurochemical substrates.

Later Ramirez (1998, 2000) proposed a new, wider classification emphasizing the differences between offense and defense rather than on aggression between individuals of the same and of different species. The intention was to provide a means of including human aggression, in spite of the unique peculiarities of our species. For example, human aggression has many practical issues connected with it such as the danger of tackling a cornered intruder or passing judgment in cases where a murderer was in a highly fearful state at the time of the killing (Blanchard & Blanchard, 1990). In Ramirez's classification two main kinds of aggression were stressed: *Direct* aggression, aggression of a physical character, was divided into three subcategories: *offense*, a type of aggression - overt threats, warnings of imminent attack or actual physical contact- usually observed only among co species; *defense*, a reactive aggressive response against any threatening target; and *indiscriminate* or irritable aggression, also reactive but to an unspecified provocation; and *indirect* aggression, a more subtle type of behavior which includes *dominance* displays and *symbolic* aggression, the latter being typical of the human species. It has been described in monkeys as attempts to assert or achieve dominance not by a test of strength, but by intimidating the opponent solely through use of its rank symbols (Schaller, 1977), and in birds by notable features such as the 'violent song phase' in defending their territory (Lack, 1947).

Another bimodal scheme classified animal aggression as: *affective defense* and *predatory attack*. Originated by ethological observations in felines (Leyhausen, 1979; Ramirez, 1990, 1991) and adapted to other species (Meloy, 1997; Sandnabba, 1995), Weinshenken and Siegel (2002) have proposed extending its application to humans. However, this can be difficult since both these components of aggression may appear together in humans. In other animals both kinds of displays are not mixed and occur at separate times. The vast majority of the studies in humans have concerned forms of aggression mainly linked with its affective/emotional forms, with little emphasis on predatory-like behavior. This bias likely results from the ease of measuring the former and the infrequent use of the latter.

Classifications of human aggression

Other proposals are focused almost exclusively on human beings. Much of the research on classifying human aggression is focused on children, and attempts to characterize aggression in a bimodal way. These schemes include multiple variables and dimensions.

One of the oldest dichotomous distinctions between different kinds of human aggression was that done many years ago by Saul Rosenzweig (1941), who delineated two specific types of aggressive responses to frustration: a *positive/constructive* profile (need-persistence), which is adaptive and prosocial, and a *negative/destructive* one (ego-defense), which is maladaptive and antisocial. Recently Friedman and Pumphrey (2002) examined some physiological correlates of this typology, and found that these aggression-frustration categories were associated with distinct autonomic nervous system response patterns.

Another group of typologies focuses on the form that aggression may take. From this approach, two subtypes may be considered (Berkowitz, 1994; Björkqvist, 1994): *Physical* aggression, produced by direct body or instrumental contact between the contenders; and *Verbal* aggression, produced by language: (e. g., gossiping, bitching, whispering, spreading vicious rumors, mockery, sarcasm, and using code names). A third subtype might be added - *gestures or postural* aggression, which may be expressed symbolically or by different facial expressions and body postures. Underwood (2002) labels them *non-verbal* displays: gestures, staring, rolling eyes, tossing hair, ignoring, social exclusion, etc.

Other classifications are based on how aggression is elicited in social interactions. Consider, for instance, the distinction (Björkqvist, 1994; Björkqvist, Lagerspetz, & Kaukiainen, 1992; Buss, 1961, 1971) between direct and indirect aggression: a) *Direct* aggression, which includes those acts produced mainly in a face-to-face confrontation, during a direct social interaction, either physical or verbal (threats-warnings or actual physical contact) and b) *Indirect* aggression, which involves delivering harm circuitously. In indirect aggression, there is no direct contact in the social interaction between two parties, but a third party –another person or an object- may participate. It is also referred to as *social* or as *relational* aggression, when it involves manipulation of social relations or damaging reputation, friendship and social status.

According to some researchers (see: Archer & Lloyds, 2002), indirect aggression is preferred by women. In a recent book, which is an excellent examination of a much-neglected area of evolutionary psychology, Anne Campbell (2002) attempts to demonstrate that women, who are less physically aggressive and less risk-prone than men, must use indirect forms of aggression. Due to their higher parental investment in a given offspring, women must monitor their behavior in order to remain alive and be able to provide the necessary parental care. First described by Feshbach (1969) among children as spreading untrue stories and ostracizing another person, indirect aggression was substantially more common among girls than among boys during the middle childhood years. This finding has since been replicated in other studies in Finland (e.g., Björkqvist, Lagerspetz, & Kaukiainen, 1992), the USA (Galen & Underwood, 1997), and Australia (Owens, 1996, 2002). Whether there is a similar sex difference in indirect aggression beyond 18 years of age (Björkqvist, Österman, & Kaukiainen, 1992; Björkqvist, Österman, & Lagerspetz, 1994) is not clear.

People are generally reluctant to admit using such devious ways of hurting another person, and for this reason most studies involving children have used reports by peers. Björkqvist et al (1994) did devise a comparable scale to measure harassment at work, and found two forms of covert aggression among university employees. One, which was termed social manipulation, was used more by women than men. The other, described as rational appearing aggression, was used more by men. It would seem that in organizations such as universities, where direct aggression is likely to be counterproductive, men learn to disguise their methods of inflicting harm so that they can be presented as justifiable criticism. However, subsequent studies involving an adult version of the measures originally used to study school children (Björkqvist et al., 1992a), did not find sex differences among British undergraduates (Campbell, Sapoxhnik, & Muncer, 1997), nor in American young adults (Richardson & Green, 2002). These gender differences thus decline with increasing age, although the kind of aggressive displays differs according to the sex of the subject (Owens, 2002).

Loeber and Schmalting (1985) applied practically the same criteria to antisocial conduct, proposing two types: *overt* and *covert*. Little and Hawley (2002) also found a high correlation between overt-

direct and relational-indirect, even though they preferred to talk about *overt* and *relational* aggression, including direct and indirect aggression as subtypes of them. In fact they identify and differentiate among four primary dimensions of aggression: *overt-direct*, *relational-indirect*, *instrumental-offensive*, and *reactive-defensive* (Little, Brauner, Jones, Nock, & Hawley, in press).

These different approaches to aggression – based either on our biological nature or on the social one – are not independent, but rather they overlap one another (e.g., Yudofsky, Silver, Jackson, Endicott, & Williams, 1986). For instance, many times the aggressive action may include verbal (i.e., criticizing or gossiping about an absent person), nonverbal (i.e., gestures, ignoring, excluding) or even a physical action (i.e., directed towards one's property or against any other target, either conspecific or interspecific, or even inanimate objects). This interdependence makes it considerably more difficult to decide which type of aggression belongs to a certain category and not to another one.

In this context, Buss (1961) proposed another dimension, referring to the *direction* of aggression - *active* aggression vs. *passive* aggression. This same perspective can also distinguish between *extra-aggression* (directed outwards), and *intra-aggression* (directed inwards), the extreme expression of which is suicide (Friedman & Pumphrey, 2002).

Where all aggression is a deliberate attempt to injure someone, a common dichotomy emerged, in terms of purpose or goal (inferred or otherwise). Depending on whether the primary *intent* was distress or harm, other authors (Bandura, 1973; Feshbach, 1964; Hartup, 1974; Hinde, 1970; Kingsbury, Lambert & Hendrickse, 1997) also distinguished between instrumental and hostile aggression. Even if intention to harm seems to be a necessary feature in any kind of aggression as a proximate goal (Anderson & Bushman, 2002), at the level of ultimate goal there is a clear difference between these two kinds - *instrumental* aggression is merely a premeditated technique for obtaining a variety of objectives, such as some reward, profit, or advantage for the aggressor (power, money, control and domination, gratification with sex or drugs), its primary goal being to achieve some form of non-aggressive incentive rather than harming the victim (Berkowitz, 1993). Aggression thus becomes a tool for obtaining the desired reward and requires neither

provocation nor anger. It focuses on changing environmental contingencies, and provides alternative ways of securing reinforcers from the environment; it may fluctuate over time as environmental reinforcements change (Lansford et al., 2002). Physiologically it is marked by underarousal.

Hostile aggression may be defined as an act that is intended to harm another person. It is primarily oriented toward the infliction of injury on another individual. Its goal is to hurt the victim, and it is driven by anger. This form is also known as *impulsive/expressive/affective* aggression, because it is an angry response to frustration or perceived provocation; it occurs in an impulsive, thoughtless (i.e., unplanned) manner, motivated by anger and aggressiveness, and elicited by a threatening stimulus that evokes fear, anger, and rage. Unlike instrumental aggression, hostile aggression is psychophysiologicaly characterized by a marked behavioral and autonomic (sympathetic) overarousal.

Many other proposed classifications of human aggression consistently follow a dichotomy. Examples would include: instrumental and reactive (Cornell, Warren, Hawk, Stafford, Oram, & Pine, 1996) and proactive and reactive (Crick & Dodge, 1996; Dodge & Coie, 1987; Pitkänen/Pulkkinen, 1969). However, they use different terms, with qualitatively different phenomenology and neurobiology, and appearing clearly distinct at the factorial level (Brendgen, Vitaro & Tremblay, 2002) - on one hand, the '*instrumental-controlled-proactive-cold blooded-offensive-predatory*' type, and on the other hand, the '*hostile-impulsive-reactive-hot blooded-defensive-affective*' one. Recent studies (Lansford et al., 2002; Poulin, Dishion, & Boivin, 2002) suggest that these forms may even be associated with a '*positive*' evaluation of aggression (leadership, socialization, reciprocal relationship and friendship with other proactive children, aggressive models...) in the case of the instrumental-controlled-proactive-cold blooded-offensive-predatory form and a '*negative*' evaluation (disruptive behavior, hostile attribution biases, internalizing problems, such as depression or somatization, and victimization) of the hostile-impulsive-reactive-hot blooded-defensive-affective form.

Towards an empirical attempt to categorize aggression

While each of the discussed categorization schemes has attempted to clarify the multiple types of aggression, these kinds of classifications have serious methodological difficulties. Sometimes it is not clear when an aggressive action belongs to a specific category. In other circumstances an aggressive action may be classified within two or more categories simultaneously. And dichotomous classifications may be too simple for human behavior that often displays both elements simultaneously (Weinshenken & Siegel, 2002). Further, the behaviors conceptualized by Buss (1961) as indirect aggression were more related to impulsive behaviors than to aggressive behaviors (Björkqvist, 1994; Ramirez, Bonnac & Cabanac, in press).

Since the design of experiments and methodologies employed in aggression research are strongly influenced by the different types and definitions adopted, a useful framework should be provided for future research. We are aware though that any attempt to sort out the associated behavior of the different aggressive systems would at best be tentative, and that any tentative classification is merely arbitrary. We also acknowledge that some semantic maneuvering is always necessary when making categories (Campbell, Muncer & Bibel, 1985; Muncer, Gorman & Campbell, 1986). In spite of these limitations, we propose that looking for stronger empirical evaluation of a series of typological models will help to find a refined typological classification scheme of human aggression, which would be key to improving aggression research and the diagnosis, prevention, and treatment of its abnormalities.

A refined classification of aggression would help in studying the relationship between the varying types of aggression at the level of the different aggressive categories as well as their biological, social, and contextual dimensions. Further, this typology could be applied to the development of effective preventative and treatment measures and programs that deal with the violent behavior in youth and adolescence. Prevention programs could be tailored to the type of aggression under question and could focus on effective ways of controlling and lessening aggressive responses. In fact, a crosscultural study carried out recently with Colombian and Spanish students, pointed out the importance of such distinctions in order to prevent aggression in adolescents

(Andreu et al., 2002). This study showed a higher level of instrumental and direct aggression in Colombian students than in Spanish counterparts. Further, social representations of aggression in Colombians was instrumental whereas in Spaniards it was fundamentally expressive. Education programs could be designed to prevent and reduce aggression based on this important distinction to increase its effectiveness. Thus, the value of a more comprehensive classification of aggression would have important applied benefits.

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