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## Variables Influencing Victim Selection in Genocide

**ABSTRACT:** While victims of racially motivated violence may be identified through observation of morphological features, those targeted because of their ethnic, religious, or national identity are not easily recognized. This study examines how perpetrators of genocide recognize their victims. Court documents, including indictments, witness statements, and testimony from the International Criminal Tribunals for Rwanda and the former Yugoslavia (FY) detail the interactions between victim and assailant. A total of 6012 decedents were included in the study; only 20.8% had been positively identified. Variables influencing victim selection in Rwanda included location, segregation, incitement, and prior relationship, while significant factors in FY were segregation, location, age/gender, and social data. Additional contributing factors in both countries included self-identification, victim behavior, linguistic or clothing evidence, and morphological features. Understanding the system of recognition used by perpetrators aids investigators tasked with establishing victim identity in such prosecutions.

**KEYWORDS:** forensic science, forensic anthropology, human rights, international law, identity, violence

Internationally, the crime of genocide is legally defined in Articles II and III of the 1948 Convention on the Prevention and Punishment of Genocide (1). All genocides in recent history have occurred in the midst of war, not as its cause or consequence but because war suspends the rule of law (2). Differentiating genocide from conflicts such as civil war requires that three elements of the crime be demonstrated: (i) the physical element or actions which represent legally defined acts of genocide (Table 1), (ii) the victim identity element or victims that constitute an ethnic, racial, religious, or national group (the only four groups protected under genocide law), and (iii) the mental element indicating the intent of the perpetrators to destroy the targeted group, in whole or in part (3).

While the physical and mental elements have been the focus of prior prosecutions of genocide by the International Tribunals for Rwanda (ICTR) and the former Yugoslavia (ICTY), the victim identity element has received less attention. This oversight has had significant consequences. Recent decisions in the Rwandan tribunal have resulted in findings of judicial error in prosecutions that failed to adequately address the element of victim identity (4). How investigators and prosecutors could potentially establish victim group identity has been previously reported (5). This study focuses on perpetrator perception and recognition of victim identity.

While positive identification is the forensic act of naming the decedent to a degree of scientific certainty through the comparison of antemortem social data with evidence derived postmortem, group identity is a more flexible social construct in which an individual's membership within a specific group can be self-proclaimed or perceived. If personal identification relies on the process of individualization, group identity relies on shared class characteristics to define membership (5). Despite its vital role in recognizing and prosecuting acts of genocide, the issue of victim identity remains poorly understood. Victim identity is often characterized by

uncertainty and presumption. For example, in Rwanda soldiers were ordered to execute those "suspected of being Tutsis" (6) or who "appeared to be Tutsi" (7). Further confounding prosecutors (and potentially perpetrators) is that the conflict areas contained not only the victim and aggressor groups but also a third ethnic group (the Croats in the former Yugoslavia, the Twa in Rwanda). How were victims selected? While victims of racially motivated violence may be recognized through the observation of physical characteristics such as skin color or facial features, members of ethnic, religious, or national groups are not often readily identified through casual observation.

Two contrasting theories of victim selection have been advanced. The first, proposed by Hilberg (8) to explain the Holocaust of Jews in Germany, defines four distinct, progressive stages of the targeting and treatment of victims by their assailants: (i) humiliation and loss of rights, (ii) designation and visible marking of victims (yellow stars, graffiti, identity cards), (iii) deportation and concentration, and (iv) complete elimination. This four-stage theory describes a large-scale genocide primarily conducted by military and paramilitary forces against a dispersed populace with whom they have no prior relationship. The second theory, "neighborhood genocide," was advanced by Hatzfeld. Hatzfeld argues that acts of genocide skip the second and third stages proposed by Hilberg and proceed directly from humiliation to elimination because of one important variable—"the killers do not have to pick out their victims: they knew them personally" (9). While Hatzfeld later concedes that the model of neighborhood genocide is oversimplified (10), he contends that prior relationship, coupled with the use of social data such as identity cards to capture those not personally known to the assailants, is the mechanism by which perpetrators recognize their victims.

This study tests these theories of victim selection in two recent genocides: the ethnic cleansing of Bosniak Muslims and ethnic Albanians by Serb forces in the former Yugoslavia and the killing of Tutsis by Hutu extremists in Rwanda. On preliminary review, the violence in the former Yugoslavia appears to follow the four-stage theory, while the conflict in Rwanda represents an example of the "neighborhood genocide."

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## Materials and Methods

Data were abstracted from indictments, court testimony, decisions, and other public documents available on the United Nations websites for the ICTY (11) and ICTR (12). Individuals were included in the study if the decedent was identified or if the exact number of decedents was known. Charges or incidents in which the number of victims was estimated were not included. Decedents were included in the study only if sufficient details of the victim's selection and perimortem period were available.

Descriptions and scoring protocols of the variables are provided in Table 2. Hatzfeld and Hilsberg's prior works have suggested the variables of segregation (8), social data (2,8), and prior relationship (2). All additional variables were developed for this study. Variables were not mutually exclusive; more than one variable could be scored for each individual. For example, a victim encountered during an attack on a village (location) who was placed in a concentration camp (segregation) and subsequently killed while attempting to escape (victim behavior) would have all three variables scored as present.

In addition to the variables, the case number was recorded, as was the specific count or charge number to allow tracking of individuals throughout the judicial process. Information was also recorded on whether the individual was identified (positively or presumptively) as well as whether the decedent was designated military or civilian.

Data were entered into an Excel spreadsheet. Tests for statistical significance between the two regions were conducted using chi-square tests, with  $p$ -values  $\leq 0.001$  considered significant.

To test the reproducibility and reliability of the scoring criteria for the variables, 25 individuals were chosen at random and re-scored several weeks after initial data collection. Interobserver error was calculated using the kappa statistic and interpreted using standards proposed by Landis and Koch (13).

## Results

Following review of all available indictments, a total of 30 met the inclusion criteria for the study, 10 from the ICTY and 20 from the ICTR. These indictments involve charges against 50 defendants (31 from Rwanda, 19 from the former Yugoslavia).

Data on 6012 decedents were recorded; 2511 individuals from Rwanda and 3501 victims from the former Yugoslavia. In the combined sample, 20.8% of victims (1250 people) were positively identified or identified by name without scientific confirmation. Rates of identification varied between the two countries, with the former

TABLE 1—Acts and crimes that encompass the physical and mental elements of genocide (1).

Five crimes punishable as genocide (physical element):
(i) Conspiracy to commit genocide
(ii) Incitement to commit genocide
(iii) An attempt to commit genocide
(iv) Complicity
(v) Successful acts of genocide
Five acts considered evidence of the intent to commit genocide (mental element):
(a) Killing members of the targeted group
(b) Causing serious bodily or mental harm through widespread torture, rape, or mutilation
(c) Deliberately inflicting conditions of life calculated to destroy the group, including deprivation of resources, detention in camps, or force relocation
(d) Prevention of births within the targeted group
(e) Forcible transfer of children

TABLE 2—Description of variables.\*

Location	Victims chosen because of geographic location, such as a specific attack on a village known to have a large population of the targeted group
Segregation (8)	Victims isolated in specific areas, either forcibly (such as concentration camps) or voluntarily (such as refugee shelters or UN safe areas)
Incitement/orders	Victims identified on lists, orders, or public media broadcasts, with assailants directed to seek out and kill these specific individuals
Age/gender	Express targeting of males of military/fighting age or younger females for sexual assault
Social data (2,8)	Recognition of targeted individuals through identification cards, public directories or registries
Self-identification	Victim responses to interrogation or inquiries as to their identity
Prior relationship (2)	Assailant has personal knowledge of victim's identity, either through prior contact (i.e., relatives, neighbors, or work colleagues) or because victim is a public figure or high-profile individual in the community
Clothing/effects	Victim's identity is perceived through material culture (their clothing or personal effects)
Victim behavior	The actions of the victim prompt assault, such as failure to comply, aggression towards the perpetrators or attempts to escape
Biological features	The physical attributes of the victim (skin or hair color, facial features) serve as the basis for the identification
Linguistic evidence	First or surname structure, language spoken or evident in documents

\*Variables suggested by prior works are cited. All others were developed for this study.

Yugoslavia having a 24.4% identification rate while only 15.7% of Rwandan victims were identified by name. Only 111 decedents in the total sample (12 from Rwanda, 99 from the former Yugoslavia) were identified as military officers; the remaining 98% were "protected persons" such as civilians or prisoners.

A breakdown of variable frequency in the combined sample and by country is provided in Table 3. Statistically significant differences in frequencies between the two regions were seen in all variables except biological features and victim behavior. The test for interobserver error in trait scoring produced a kappa statistic of 1.00, indicating perfect agreement (13) and reproducibility.

## Discussion

It is important to note that an inherent bias exists in the types of cases selected for prosecution by the tribunals. In addressing crimes of such magnitude, it is not possible to prosecute every incident, death, or infraction. Therefore, prosecutorial preference is given to well-documented, witnessed large-scale events with appropriate supporting physical and material evidence. In both tribunals, actions associated with the military, police, government, or militias received the most attention. As such, the sample included in this study is representative but not exhaustive for all victim selection types or circumstances. For example, the high prosecution rate of individuals overseeing concentration camps in the former Yugoslavia resulted in a correspondingly high percentage of individuals for whom segregation was a contributing factor. Whether the observed percentage in this study reflects the actual proportion of total victims killed while in some form of

TABLE 3—Frequency of variables in the combined sample and by country.

Variable	Rwanda (n = 2511)	Former Yugoslavia (n = 3501)	Combined sample (n = 6012)
Location	2290 (91.2)	1970 (56.3)	4260 (70.8)
Segregation	2191 (87.3)	2070 (59.1)	4261 (70.9)
Incitement/orders	2137 (85.1)	680 (19.4)	2817 (46.9)
Age/gender	30 (1.2)	857 (24.5)	887 (14.8)
Social data	118 (4.7)	380 (10.9)	498 (8.3)
Self-identification	88 (3.5)	184 (5.3)	272 (4.5)
Prior relationship	212 (8.4)	32 (0.9)	244 (4.1)
Clothing/effects	0 (0)	135 (3.9)	135 (2.2)
Victim behavior*	38 (1.5)	43 (1.2)	81 (1.3)
Biological features*	21 (0.8)	60 (1.7)	81 (1.3)
Linguistic evidence	0 (0)	18 (0.5)	18 (0.3)

Percentage values are in parentheses.

\*No statistically significant difference between the two countries for these variables.

segregation cannot be known. Variable frequencies are reported and interpreted solely on their relative role within the observed sample.

### Location

Geographic location played a significant role in the selection of 91.2% of Rwandan and 56.3% of former Yugoslavian victims. Indictments issued by the ICTY describe attacks on “Muslim population centers” and “the intensive shelling of Muslim areas” (14). Although sometimes supported by preconflict census statistics (15), such designations were typically presumptive or based on witness perceptions of population demographics. In Kosovo, the capital city of Pristina was systematically cleared of ethnic Albanians street by street (16). In Rwanda, location proved even more significant. Attacks on villages with a high percentage of Tutsis were reported, as was the use of roadblocks in strategic areas, allowing the perpetrators to screen those attempting to flee.

While attacks based on location may appear an effective means of targeting large numbers of the intended group, such attacks raise the strong possibility of collateral damage to friendly or nontargeted populations. In preconflict Rwanda, Bosnia, and Kosovo, no village was exclusively populated by a specific ethnic group. Shelling or sniper attacks in urban areas such as Sarajevo, even when directed at areas with predominantly Muslim inhabitants, endangered Serb civilians. While victim selection based on location offers perpetrators easily defined targets, it comes with considerable risk.

### Segregation

The segregation of victims from the general population occurred in a number of forms: concentration camps, refugee centers, and UN safe areas. The use of concentration camps (such as the Susica, Buk Bijela, and the Foca Kazneno-popravni Dom camps) is well documented in the former Yugoslavia. Retention facilities ranged from short-term use of public buildings such as high schools to long-term, large-scale detention facilities, such as the Omarska camp in Prijedor, which was a converted mining facility (17). Once segregated, individuals retained in the camps were killed because of behavioral infractions such as failing to comply with orders, because of a prior relationship with the guards, or simply as a matter of course. In Bosnia, isolation of the targeted group into UN “safe areas” such as Srebrenica also provided perpetrators with enclaves of victims already identified as non-Serb (18).

While concentration camps and safe areas were prevalent in Bosnia, the most common form of segregation in Rwanda was refugee

camps. The identity of those seeking refuge was presumptive, both to the perpetrators and, subsequently, the prosecutors: “groups of people seeking refuge in the same area were most likely predominantly Tutsi” (19). In Rwanda, a common ruse employed by the assailants was to direct those seeking refuge to specific areas or holding centers, only to then attack the centers (20,21).

### Incitement

Incitement was far more frequent in Rwanda (85.1%) than in the former Yugoslavia (19.4%). Incitement in Rwanda took a number of forms, including the creation of victim lists, active recruitment of assailants, and the use of hate media. The most prevalent was the establishment of lists of people to be executed. Civilian authorities and militia generated such lists. The Intelligence Bureau (G-2) of the Rwanda Army also established and regularly updated lists of those deemed “the enemy [Tutsis] and their accomplices [moderate Hutus who supported Tutsis or refused to participate in the killing]” (22). “Military patrols... scoured the city, lists in hand, to execute the Tutsi” (23). Civilian and military individuals were also engaged in active recruitment of assailants, providing weapons and training, as well as organizing rallies, meetings, and public displays of anti-Tutsi rhetoric and rewarding those who killed Tutsis (24), often with drink or money (25). A common recruitment tool was the training of recent recruits in public places, accompanied by the chanting of slogans inciting the extermination of the Tutsis (26). Military and civilian leaders delivered speeches, often broadcast by megaphone, encouraging the Hutu population to systematically eradicate the Tutsi “enemy” (27). Indirect forms of incitement were also reported: “civil servants and political appointees who did not approve or participate with enough zeal in the killings of Tutsis were dismissed by authorities” (28).

The creation of hate media in the form of the Radio Television Libre Des Mille Collines (RTL) and the newspaper *Kangura* for the express purpose of disseminating anti-Tutsi campaigns was yet another form of incitement (29). Songs containing anti-Tutsi sentiments were composed and broadcast on RTL as well as at large public gatherings held in athletic stadiums throughout Rwanda and from vehicle-mounted public address systems (30).

Incitement in the former Yugoslavia entailed low ranking soldiers or police carrying out direct orders from their superior officers. Although the use of hate media and propaganda has been reported (31), no specific examples of such incitement were contained in the ICTY cases included in this study.

### Age/Gender

Many victims were targeted because of their age and gender. In the former Yugoslavia, males of fighting age were preferentially selected. Survivors detained in the Smrekovnica/Smrekonice prison in Kosovo indicated that the criteria for their arrest appeared to be their age, sex, and in some cases their residence. Interviewees reported fellow male prisoners as young as 12 and as old as 75 but stated that 90% were between the ages of 18 and 55 (32). General Ratko Mladic, a prominent military leader, is quoted as saying: “first, offer the able-bodied and armed men to surrender and, if they refuse, destroy them” (33). This systematic isolation of military age men was further evidenced by the detention of Muslim women, children, and the elderly in separate facilities (34,35).

In Rwanda, age and gender bias focused on the selection of young Tutsi females targeted for sexual assault. Multiple indictments contain charges of rape and assault, as well as incitement to commit such acts, against victims in their teens and early twenties (36). As a result of these selection biases, a significant difference was seen in the reported frequencies of the age/gender variable in the Balkans (24.5%) and Rwanda (1.2%).

### Social Data

Perpetrators’ reliance on social data such as identity cards to identify victims was widely reported in both countries. In Rwanda, “individuals seeking Tutsis could identify their targets simply by asking individuals to show their identification card” (37). Identity cards specifying the ethnic group of the bearer were introduced in Rwanda in 1931 and their use continued until the genocide in 1994 (38). Identity cards and social registries were used in combination with roadblocks along refugee evacuation routes: “at these roadblocks, people’s identities were checked, by means of verification of identity cards, and the Tutsi or those identified as such were summarily executed” (39). Even those who managed to obtain false identification cards indicating they were not of the targeted group were caught and killed (40). However, despite frequent references to the use of roadblocks and identity cards as a means of identifying Tutsis in virtually all ICTR indictments, few identified victims, estimated numbers of victims or specific accounts were included in the charges. As a result, the relatively low frequency of the social data variable (4.7%) in Rwanda likely underestimates the actual numbers of victims identified in this manner.

In the former Yugoslavia, identity cards were also a commonly reported means of establishing victim identity, although again its low frequency (10.9%) may not be an accurate representation of its influence. A ubiquitous pretext for arrest in Kosovo was the lack of any proper identification and the purported necessity for police to establish someone’s identity. As the majority of Kosovo Albanians did not have any formal identity cards (passport, *licna karta* or identity card, driver’s license), they were perpetually at risk for arbitrary arrest (41).

### Self-identification

Reports of victims self-identifying were rare, only 4.5% of the total sample. This variable was scored as present only in specific instances in which victims responded to verbal inquiries by the perpetrators calling for members of the targeted group to identify themselves. However, it can be argued that self-identification extends beyond such unequivocal cases to encompass a broader spectrum of victim behavior. For example, those who pleaded for help or sought refuge may have inadvertently disclosed their targeted status in so doing.

### Prior Relationship

Scoring of this variable includes cases in which the perpetrator and victim had personal knowledge of each other prior to the conflict as well as the direct targeting of classes of individuals known to the community (such as teachers or doctors) or well-known personages such as politicians or entertainers. In Rwanda, those in power ordered the local people and militia to kill intellectuals and influential people, including teachers and university professors (42). Among the most symbolic was the former Queen of Rwanda, Rosalie Gicanda, “a historical symbol for all Tutsi” (43).

Killings also included relatives. One Rwandan defendant went so far as to instruct that the killings begin with one of his own children born to a Tutsi woman (44). Another defendant first sheltered 18 of his Tutsi wife’s relatives and then ordered them killed (45). Hatzfeld details an interview with one assailant who describes an existing yet altered relationship with his victim: “in truth, it came to me only afterward: I had taken the life of a neighbor....at the fatal instant, I did not see in him what he had been before” (46).

This notion of “neighborhood genocide” also extends to the former Yugoslavia, particularly in rural areas. Concentration camp guards often singled out prisoners who were acquaintances or neighbors from their communities and subjected them to particularly brutal and humiliating treatment, with little regard for the prior relationship (47). As with social data, general descriptions of individuals attacking those known to them were frequently reported but specific instances were rarely provided.

### Clothing/Personal Effects

Material culture, particularly clothing, varied among the ethnic groups in the former Yugoslavia, largely reflecting religious differences among the groups. One report details survivors describing how they recognized Serb civilians from a nearby town by their manner of dress (16). Kosovar Albanian males who wore the traditional *plis* or white hat were expressly targeted for doing so, including one incident in which the hats were discovered thrown on the ground beside 40 dead males from the Globocica/Cloboc area (16). Others report large collections of bloodstained *plis* with Chetnik symbols scrawled on them (48).

Clothing also proved significant in other ways. Investigators have presumptively classified decedents as civilian or military based on clothing (i.e., the presence or absence of a uniform) (49). Those targeted often used the different styles of uniforms worn by the military, paramilitary, and police as a means of identifying their tormentors. In at least one instance, ethnic Albanians were forced to strip and don Serbian military uniforms and were used as human shields during the forcible transfer of prisoners (16).

No specific instances of victims identified by clothing styles or personal effects were reported in Rwanda. This may be an artifact of a limited marketplace, in which access to material goods is restricted, producing a uniformity of material culture across ethnic groups. Although differences in facial features and skin color between Hutus and Tutsis have been described at length (50), little attention has been paid to variations in clothing styles between the two groups, if any exists.

### Victim Behavior

The overall number of reports in which victim behavior directly led to the assault was small, only 81 cases in the total sample with

no statistically significant differences between the two countries. However, such instances were dramatic and typically extensively documented. Most common was violence incited by a failure of victims to comply with orders: “the soldiers demanded that the refugees identify themselves with their identification cards. When the refugees refused, the soldiers attacked the mosque, shooting and killing many people” (51). Attempts to escape also resulted in death (52). Pleading for aid or compassion was normally met with violence (53). In Rwanda, even the physical prowess of the targeted individual may have influenced survival: “when we could not catch the most agile of them, we fell back on the puny ones” (54).

### *Biological Features*

Defining the role of morphology in concepts of ethnicity or religious and national identity is problematic. The ICTR found that racial groups were “based on the hereditary physical traits often identified with a geographic region, irrespective of linguistic, cultural, national, or religious factors” (55), while ethnic groups “share a common language and culture” (56). The ICTY argued that the concepts of race and ethnicity “partially overlap” (57). Prior research suggests that ethnicity and nationality can be represented in morphological features. For example, the craniometric biological affinity computing program known as *FORDISC 3.0* (58), developed by the University of Tennessee, calculates the posterior probability of an unknown skull belonging to a specific racial (i.e., white or Black), ethnic (i.e., Hispanic), or national (i.e., Chinese) group.

Within Rwanda, the Hutus and Tutsis are considered to each possess an average dominant somatic type, even if not every individual conforms to it. Tutsis, often described as Europeans with black skin, are extremely tall and thin with sharp, angular facial features, while Hutus are generally short with a wide nose and thick lips (50,59). Repeated references to the targeting of those who “appeared Tutsi” occur throughout the Rwandan tribunal proceedings, although specific instances of victim selection based on physical features were rarely reported or not recognized as such by witnesses.

Somatic stereotyping is less accepted among the ethnic groups in the former Yugoslavia, with no physical attributes ascribed to any of the relevant groups. Ross (60) reports that cranial metric analysis can discriminate between male Bosnian and Croatian individuals. However, Ross’ study does not specify that the individuals included in the sample were positively identified nor indicate how the ethnic affinity of the individuals was determined beyond general location of recovery. Most importantly, this metric variability does not translate into socially accepted notions of morphological distinction between the two ethnic groups.

Despite this, physical appearance did factor into perpetrator decision making. For example, a Kosovo Albanian man had been ordered to dig a mass grave because he had been mistaken for a “gypsy” (Roma) because of his dark skin (61). Mitochondrial DNA haplogroup frequency among Serbs, Bosniaks, and Croats has been reported previously (62) although the relative frequencies contributed little to accurate classification of unknown individuals. This suggests distance between populations, even if not expressed phenotypically.

Physical appearance was one of the two variables in which the frequencies observed in the two regions were not statistically significant, although the number of cases in the former Yugoslavia was slightly higher. Given the socially accepted interpretation of physical features in Rwanda and the lack of somatic stereotyping in the former Yugoslavia, this result is somewhat puzzling and may be an artifact of case selection or the inclusion of specific types of witness statements by certain prosecutors. It is likely that the role of

morphological features in victim selection is underrepresented in this study, particularly in Rwanda.

### *Linguistic Evidence*

Surnames in the former Yugoslavia are a consistent and reliable indicator of ethnic identity. Victims were expressly targeted because of their names (16). Language spoken also provided clues to identity. Following the termination of Albanian-language teaching at Pristina University and all public schools in Kosovo (63), those found using the language were targeted.

No instances of victim selection based on linguistic evidence were reported in Rwanda. Both Hutus and Tutsis share a common language, Kinyarwanda, although French, English, and Kiswahili are also commonly spoken (64). No published reports indicate any correlation between surname and ethnicity in Rwanda.

### **Conclusion**

Statistically significant differences were seen in the frequencies of all victim selection variables between the two countries, with the exceptions of victim behavior and biological features. The most frequently reported variables in Rwanda were location, segregation, incitement, and prior relationship. In the former Yugoslavia, segregation, location, age/gender, incitement/orders, and social data were most prevalent.

These results indicate that neither the “neighborhood genocide” model nor the four-stage theory successfully explain these contemporaneous yet geographically diverse acts of genocide. The “neighborhood genocide” theory purported to describe the mechanism of victim selection in Rwanda is also not supported by the findings of this study. The “neighborhood genocide” theory hypothesizes that prior relationship and social data should be the most significant variables, rather than the overwhelming influence of location, segregation, and incitement reported here. The high frequency of segregation in concentration camps (59.1%) reported in the former Yugoslavia is consistent with stage III of the four-stage model proposed by Hilberg (8) but the lower incidence of social data (10.9%) and the absence of express victim marking (stage II) suggest the model is not a perfect fit.

The findings of this study suggest that perpetrators rely on a variety of indicators when identifying potential victims, including variables such as clothing, age/gender, and linguistic evidence not previously described. While prior proposed theories of selection in genocide may describe general patterns or mechanisms, they fail to capture the full spectrum of characteristics that define the victim group.

Prosecutors can no longer afford to presumptively establish victim identity in acts of genocide. Forensic investigators tasked with determining victim identity must rely on the same system of recognition used by the perpetrators. Understanding how the assailants recognize their victims is the first step in identifying the class characteristics that can be used to accurately assign conflict victims to their appropriate social groups.

### **References**

1. General Assembly of the United Nations. *Resolution 260 A [III], convention on the prevention and punishment of genocide*, December 9, 1948. Available at: [http://www.au.af.mil/au/awc/awcgate/law/genocide\\_convention.htm](http://www.au.af.mil/au/awc/awcgate/law/genocide_convention.htm). Accessed on November 22, 2006.
2. Hatzfeld J. *Machete season: the killers in Rwanda speak*. New York, NY: Farrar, Straus and Giroux, 2005.

3. Williams PR, Scharf M, Jafari J, Ahern K, Walker E, Wolf R. *Genocide in Darfur: a legal analysis*. Available at: <http://www.publicinternational-law.org>. Accessed on October 2, 2006.
4. United Nations General Assembly Security Council. *Eleventh annual report of the international criminal tribunal for Rwanda*, A/61/265-S/2006/658, August 16, 2006. Available at: <http://69.94.53/ENGLISH/annualreports/a61/s-2006-658.pdf>. Accessed on November 21, 2006.
5. Komar D. Identification versus identity in genocide investigations. *Indian J Phys Anthropol Hum Genetics* 2007;in press.
6. Prosecutor v. Bagambiki and Imanishimwe. ICTR-97-36-I, Indictment, para. 3.24, 1997.
7. Prosecutor v. Kabiligi and Ntabakuze. ICTR-97-34, count 6.43, 1997.
8. Hilberg R. *The destruction of the European Jews*. Rev. ed. New York: Holmes & Meier, 1985.
9. Hatzfeld J. *Machete season: the killers in Rwanda speak*. New York: Farrar, Straus and Giroux, 2005.
10. Hatzfeld J. *Machete season: the killers in Rwanda speak*. New York: Farrar, Straus and Giroux, 2005.
11. International Criminal Tribunal for the Former Yugoslavia. *Cases and judgments*. Available at: <http://www.un.org/icty/case-e/index-e.htm>. Accessed on October 15, 2006.
12. International Criminal Tribunal for Rwanda. *Status of Cases*. Available at: <http://69.94.11.53/default.htm>. Accessed on October 15, 2006.
13. Landis JR, Koch GG. The measurement of observer agreement for categorical data. *Biometrics* 1977;33:159–74.
14. Prosecutor v. Tadic and Borovnica. ICTY-94-1-I, sec. 2.2 and 2.1, 2006.
15. Prosecutor v. Jankovic et al. ICTY-96-23-PT, Amended Indictment, para. 1.1, 1999.
16. OSCE/ODIHR. *Kosovo/Kosova: as seen, as told*. Warsaw, Poland: OSCE Office for Democratic Institutions and Human Rights, 1999.
17. Prosecutor v. Borovnica. ICTY-94-I-1, Indictment, para. 1, 2006.
18. Prosecutor v. Erdemovic. ICTY-96-22, Indictment, para. 2 and 8, 1996.
19. Prosecutor v. Kayishema et al. ICTR-95-I-1, First Amended Indictment, para. 13, 1996.
20. Prosecutor v. Kabiligi and Ntabakuze. ICTR-97-34, Indictment, para. 5.35, 1997.
21. Prosecutor v. Bisengimana. ICTR-2000-60-I, Indictment, para. 3.32, 2000.
22. Prosecutor v. Kabiligi and Ntabakuze. ICTR-97-34, Indictment, para.5.27-5.30, 1997.
23. Prosecutor v. Bagosora. ICTR-96-7-I, Amended Indictment, para. 1.26, 1999.
24. Prosecutor v. Karemera et al. ICTR-98-44-I, Amended Indictment, sec. II.14, 2005.
25. Prosecutor v. Zigiranyirazo. ICTR-2001-73-I, Indictment, para. 19, 2005.
26. Prosecutor v. Serushago. ICTR-98-39-I, Modified indictment, para. 4.13, 1998.
27. Prosecutor v. Kanyabashi. ICTR-96-15-I, Amended indictment, para. 5.8, 2000.
28. Prosecutor v. Kanyabashi. ICTR-96-15-I, Amended indictment, para. 6.26, 2000.
29. Prosecutor v. Kanyabashi. ICTR-96-15-I, Amended indictment, para. 1.16, 2000.
30. Prosecutor v. Bikindi. ICTR-2001-72-I, Amended indictment, sec. 13 and 39, 2005.
31. Gagnon VP. Serbia's road to war. In: Diamond L, Plattner MF, editors. *Nationalism, ethnic conflict and democracy*. Baltimore: John Hopkins University Press, 1994;117–31.
32. OSCE/ODIHR. *Kosovo/Kosova: as seen, as told*. Warsaw, Poland: OSCE Office for Democratic Institutions and Human Rights, 1999.
33. Prosecutor v. Nikolic. ICTY-02-63-I, Indictment, para. 9, 2002.
34. Prosecutor v. Jankovic et al. ICTY-96-23-PT, Amended indictment, para. 1.3, 2006.
35. Prosecutor v. Erdemovic. ICTY-96-22, Indictment, para 5, 1996.
36. Prosecutor v. Musema. ICTR-96-13-I, Indictment, 1996.
37. Prosecutor v. Kayishema et al. ICTR-95-I-1, First amended indictment, sec. 14, 1996.
38. Hatzfeld J. *Machete season: the killers in Rwanda speak*. New York: Farrar, Straus and Giroux, 2005.
39. Prosecutor v. Bizimungu et al. ICTR-2000-56-I, Indictment, para. 5.23, 2002.
40. Prosecutor v. Nchamihigo. ICTR-01-63-I, Amended indictment, sec. 51, 2001.
41. OSCE/ODIHR. *Kosovo/Kosova: as seen, as told*. Warsaw, Poland: OSCE Office for Democratic Institutions and Human Rights, 1999.
42. Prosecutor v. Akayesu. ICTR-96-4-I, Amended indictment, sec. 20, 1996.
43. Prosecutor v. Kabiligi and Ntabakuze. ICTR-97-34, Indictment, sec. 6.41, 1997.
44. Prosecutor v. Karemera et al. ICTR-98-44-I, Amended indictment, sec. 32.1, 2005.
45. Prosecutor v. Zigiranyirazo. ICTR-2001-73-I, Indictment, para. 26, 2005.
46. Hatzfeld J. *Machete season: the killers in Rwanda speak*. New York: Farrar, Straus and Giroux, 2005.
47. Prosecutor v. Jankovic et al. ICTY-96-23-PT, Amended indictment, para. 5.3, 2007.
48. OSCE/ODIHR. *Kosovo/Kosova: as seen, as told*. Warsaw, Poland: OSCE Office for Democratic Institutions and Human Rights, 1999.
49. OSCE Mission in Kosovo. *Kosovo/Kosova: as seen, as told, Part II*. Austria: Schaeffer GmbH, 1999.
50. Prunier G. *The Rwanda crisis: history of a genocide*. New York: Columbia University Press, 1995.
51. Prosecutor v. Bagosora. ICTR-96-7-I, Amended indictment, sec. 6.55, 1999.
52. Prosecutor v. Akayesu. ICTR-96-4-I, Amended indictment, sec. 18, 1996.
53. Prosecutor v. Bizimungu. ICTR-2000-56-I, Indictment, sec. 5.36, 2002.
54. Hatzfeld J. *Machete season: the killers in Rwanda speak*. New York: Farrar, Straus and Giroux, 2005.
55. Prosecutor v. Akayesu. ICTR-96-4-T, para. 514, Sept. 2, 1998.
56. Prosecutor v. Kayishema and Ruzindana. ICTR-95-1-T, para. 98, May 21, 1999.
57. Prosecutor v. Krstic. ICTY-98-33, para. 555, Aug. 2, 2001.
58. Ousley SD, Jantz RL. *FORDISC 3.0 Personal computer forensic discriminant functions*. Knoxville: University of Tennessee, 2005.
59. Hiernaux J. Heredity and environment: their influence on human morphology. A comparison of two independent lines of study. *Am J Phys Anthropol* 1963;21(4):575–89.
60. Ross AH. Regional isolation in the Balkan region: an analysis of craniofacial variation. *Am J Phys Anthropol* 2004;124:73–80.
61. OSCE/ODIHR. *Kosovo/Kosova: as seen, as told*. Warsaw, Poland: OSCE Office for Democratic Institutions and Human Rights, 1999.
62. Cvjetan S, Tolk HV, Lauc LB, Colak I, Dordevic D, Efremovska L, et al. Frequencies of mtDNA haplogroups in southeastern Europe—Croats, Bosnians and Herzegovinians, Serbians, Macedonians and Macedonian Romani. *Coll Antropol* 2004;28(1):193–8.
63. OSCE/ODIHR. *Kosovo/Kosova: as seen, as told*. Warsaw, Poland: OSCE Office for Democratic Institutions and Human Rights, 1999.
64. Briggs P, Booth J. *Rwanda*. 3rd ed. Guilford, CT: Globe Pequot Press, 2006.

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