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The Relationship between Homicide and Suicide: A Narrative and Conceptual Review of Violent Death

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In this paper, we provide a narrative review of the theoretical discourse and empirical research on the relationship between homicide and suicide. Understanding of homicide and suicide has evolved from religious condemnation during the Middle Ages, to medicalization in the 1800s, and socialization in the 1900s. There is a long historical tradition of treating homicide and suicide as a single phenomenon. Contemporary thought, the stream analogy, posits that homicide and suicide are acts of violence differentiated only by the direction of aggression. Empirical research has provided modest evidence supporting the stream analogy theory. A more comprehensive framework that incorporates cultural domains is needed to advance the research field on homicide and suicide.

Keywords: homicide, suicide, violence, social theory

Roughly 1.4 million deaths were attributed to violence in 2004, with 600,000 defined as homicide, and 844,000 the result of suicide (World Health Organization 2008). As such, both homicide and suicide share a common context of violence. While homicide and suicide are often considered separately as research subjects, there is a long tradition of viewing the two forms of violence as a single phenomenon. Contemporary social theory, for example, often considers homicide and suicide as correlates, explaining worldwide homicide and suicide rates as either inversely or positively correlated. But describing homicide and suicide as merely one or the other falls short, as the relationship between homicide and suicide varies across time and space (Bills and Li 2005), intimating that there may be larger socio-cultural elements at play.

Contrasting with the morbidity of the subjects, attempts to decipher the relationship between the two as processes of killing reveal a rich and vibrant history, specifically in the fields of philosophy, criminology, anthropology, sociology, psychology, and public health. In this paper, we provide a general narrative review of the theoretical discourse and empirical research on the relationship between homicide and suicide. Our aim is not to provide an exhaustive overview of the many theories on violent death, but rather to outline an historical arc with the aim of providing a more comprehensive theoretical understanding of violent death.

1. Early Etymology

Efforts to understand the relationship between homicide and suicide are quite old. The earliest denotations of a concrete relationship between homicide and suicide are etymological. Homicide, as cited in the Oxford English Dictionary (2004), is defined as "one who kills a human being," and finds common usage in English-speaking countries as early as the thirteenth century. Contrastingly, the term suicide does not come into use until much later, in the mid-1600s. The use of the term is predated by the practice of the term *self-homicide*, as cited in the

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title to the English Renaissance poet and Anglican priest Donne's (1631) *Biathanatos: A Declaration of that Paradoxe, or Thesis, that Selfe-homicide is not so naturally Sinne, that it may never be otherwise.* Donne shared his work on the justification for certain types of suicide (although he failed to detail precisely what these were) with close friends after completing his work in 1608, although he requested it not be published due to his concerns over reproach from the Church. Grounding his argument within the framework of Christian thought, Donne argued that no Biblical passage explicitly damned suicide (irrelative of the larger Mosaic condemnations against killing in general—a denunciation reserved for acts of homicide), thus leaving the moral door open for acceptable forms of self-death.

Although Donne's work indirectly established a moral and ethical distinction between homicide and suicide, linguistically and culturally the prefix *self*- (as in Donne's title) served only as a way of modifying preconceived notions of death as defined by the term homicide, implying that the two acts of killing are one and the same. *Suicide* as a distinct term is important because it provides a clear measure of differentiation between processes of death. Sir Thomas Browne (1643) and Charleton (1668) recognized the problems with the term *self-homicide* and utilized the combination of the two roots: *sui*- (self) and *- cide* (from the verb *caedre*, to kill). Though lexicographers have flushed out semiotic differences between the terms, social and health scientists have had a harder time explicating a precise relationship between the two.

2. Religious Thought

Although Donne's work is by no means the first to discuss suicide within the context of religious doctrine, it does provide a framework for further investigation into the divergent theological arguments concerning the relationship between homicide and suicide. Based on the Platonic notion that no citizen had the right to deprive society of civic life, eleventhcentury England deemed both homicide and suicide as illegal, as both constituted the breaking of bonds between the living– larger society–and the now dead (MacDonald and Murphy 1990). Lifeless bodies of individuals deemed to have committed suicide were sentenced to torture–corpses were dragged through the streets and hanged, bodies buried without ceremony, and individuals damned to hell by the Church. Further retribution was achieved by the state's confiscation of the deceased's estate (Minois 1999).

Paradoxically, while almost all suicide deaths were condemned, there was one avenue in which they were praised. Cases of honorific sacrifice, occurring within the realm of the sacred (as opposed to the profane), were praised not only in eleventh-century Western Europe. Descriptions of societies' acceptance of suicide as sacrifice recur throughout history in many different cultures, examples included hara-kiri, and contemporary forms of religious martyrdom (Bynum 1987; Datta 1988; el Sarraj 2002; Pinguet 1993). Religious doctrine and theology have often tried to formalize explicit statements on the forms and justifications for violent death. Duns Scotus wrote in the fourteenth century that "no one can be a homicide of himself without a special command from God" (Minois 1999, 32). Such an opinion is rather more nuanced than that of St. Augustine (1940) who, in City of God, considered suicide a sin-the voluntary surrender of one's reason to the presence of an evil aberration of one's will-no different than the act of homicide.

As a matter of comparison, the various Christian faiths were not alone in censuring suicide similarly to homicide. Jainism, a religion of the Indian subcontinent, considered emotional (*raga*) violence (*himsa*), or suicide, a spiritual crime. Fortyeight types of death, each categorically defined as either *balamarana* (childish/foolish death), *pandita-marana* (wise death), *pandita-pandita-marana* (the wisest of wise death) are described in Jain doctrine. Homicide and suicide were both a form of the first category and were unequivocally condemned (Settar 1989).

The period from the Renaissance to the Enlightenment marked a departure from religious understandings of violent death. Suicide and homicide began to be conceived as separate domains with suicide emphasized as a social phenomenon.

3. Medicalizing and Psychologizing the Relationship

In the 1800s, Jean-Etienne Dominque Esquirol devised a classification system for mental disorders, including both homicidal and suicidal insanity. Esquirol (1965) devoted an entire chapter to the study of suicide and also went on to define homicidal insanity as one of three types: intellectual monomania, affective monomania, and instinctive monomania. The idea that suicidal and homicidal tendencies could have a medical basis, and were not merely deprivations of the soul, led to a perception of these individuals not as victims, but rather as potential murderers. Thus individuals at risk of homicide and suicide were increasingly incarcerated. Commenting on suicide, Foucault wrote, "thus the sacrilege of suicide was annexed to the neutral domain of insanity" (1973, 139).

The result was that suicidal and homicidal tendencies left the domain of the church and entered the realm of the asylum and prison, respectively. While the change of setting represented difference, the medicalization of suicide also served to further the relationship between the two forms of death, as the insanity of suicide was conceived as a direct reflection of our unconscious need to commit homicide. Flaubert makes this point in a letter to Louise Colet in 1853: "We want to die," he writes, "because we cannot cause others to die, and every suicide is perhaps a repressed assassination" (as cited in Minois 1999, 322). Flaubert's statement is noteworthy because it implies that suicide rates would be higher in more structured countries, and homicide higher in less, a pattern that has been noted more recently as well (Lester 1996).

While Esquirol medicalized suicide, Freud psychologized it. *On Murder, Mourning and Melancholia* perceived suicide as the unconscious turning of aggression against the self, while inversely homicide was the turning of aggression outward toward another (Freud 2004). Thus suicidal tendencies were rooted in self-representation of a homicidal drive influenced by either a sexual frustration or death instinct turning inward on oneself. A similar viewpoint was advocated by Palmer (1972), who defined homicide as outward-directed personal violence, while suicide was seen as inward-directed personal violence.

The breadth of psychological understanding of violent death, especially that of suicide, was broadened in the 1960s by Schneidman, Farberow, and Litman through the formation of the Los Angeles Suicide Prevention Center, and the founding of the American Association of Suicidology in 1968. With the work of Havens (1965), Allen (1967), and Litman and Swearingen (1972), psychologists began to focus attention away from Freud's (2004) conception of suicide as "murder turned against the self."

A psychological understanding of the relationship between homicide and suicide has its limits (Fazel and Grann 2004; Shaw et al. 1999; Erb et al. 2001). Prevailing opinion among psychologists found no correlation between diagnosed mental disorders and dangerousness, or between mental illness and criminal behavior (Colaizzi 1989). The problem of utilizing a psychological model to directly address the question of the relationship between homicide and suicide is that neither homicide nor suicide is a psychiatric disorder. Speaking directly for suicide, Schneidman (1985, 202) argued suicide was not a psychiatric disorder, but rather "a complicated, multidimensional, conscious and unconscious 'choice' of the best possible practical solution to a perceived problem, dilemma, impasse, crisis, desperation."

Advances in biomedical technologies and brain imaging have allowed for correlative studies between homicide and suicide on the basis of levels of chemical components in cerebrospinal fluid and discrete brain areas. Analysis of the role of serotonin on suicidal behavior by Åsberg, Traskman, and Thoren (1976) provided the impetus for thinking about violent death from the viewpoint of psychopharmacology. Parallel studies on homicide have shown similar corollaries. Walendzik, Zimmer, and Skopp wrote that: "a differentiation between suicide and homicide seems promising only on condition that the distribution of serotonin and metabolite 5hydroxyindoleacetic acid concentrations in various brain areas is considered" (2000, 131).

4. Violent Death as a Social Phenomenon

In more contemporary times, the relationship between homicide and suicide has also been investigated in epidemiology. Early studies correlating rates of homicide and suicide date to at least the nineteenth century with the work of Guerry (1833), who argued homicide and suicide were comparable phenomena. Guerry based his conclusions on studies showing higher rates of homicide in the south of France and conversely higher rates of suicide in the north of France. Guerry's use of geography as a determinant of the form of death was taken up by other authors as well (Bohannan 1960; Durkheim 1897; Verkko 1951).

Italian scholars also took note of the topic. Although legists had ruled on homicide and suicide in the past, theories concerning the motivations of killing from a criminological viewpoint provided a novel outlook on the subject. Morselli (1879) and Enrico Ferri argued that homicide and suicide are polar opposites (or two sides of the same phenomenon). Verkko (1951, 145-57) furthers Morselli's arguments in that the criminal:

blindly obeys his instincts and passions and because of the weakness in his mental structure commits homicide...The noncriminal type in whom the sense of duty has been implanted destroys himself instead.

Verkko provides a clear distinction between the two forms of death—homicide falls within the realm of crime, while suicide does not.

Pressed by larger societal issues of the time, several scholars, such as Tissot (1840), again tackled the relationship between homicide and suicide from the perspective of culture and society—as a direct response to the larger society in which one lived. Both homicide and suicide were considered abnormal behavior, but Tissot located the defect in the problems of society rather than in the individual . Writing on suicide, Spurzheim (1817) alleged that the greater English tendency to kill oneself (compared to other European countries) was a result of the personal frustration created by excessive social liberty. Precipitated by such thoughts, later nineteenth-century sociologists and social theorists speculated on the role societal forces played in the relationship between homicide and suicide.

Durkheim (1897) provided an even lengthier refutation of the psychologized theory of Freud. Durkheim considered suicide to be a social fact and thus describable in terms of social factors, using his ideas on the statistical relationship between the two forms of death. Initially Durkheim described an inverse relationship between suicide and homicide. However, this correlation was not consistent in times of economic recession and during war. He theorized that such a discrepancy was secondary to social factors and further differentiated suicide into three types (egoistic, altruistic, and anomic) each explained in terms of the individual's relation to society, including the cultural nuances of religion, income, and urbanity. Durkheim thought suicide would be more common where social integration was weak: a notion alluded to previously (Flaubert as cited in Minois 1999, 322). Durkheim's understanding led the general trend in social theory to consider homicide and suicide as two unrelated forms of violent death. In fact there now exists a large body of research that examines both homicide and suicide separately.

Efforts to reincorporate and strengthen the theoretical relationship between homicide and suicide were championed by Henry and Short (1954). They expanded Durkheim's theories regarding the relationship between social integration and suicidal risk, and expanded it to homicide. Integrating Durkheim's theories on suicide and social integration and Freud's (1947) theories on intra-psychic aggression provided the theoretical framework for Henry and Short's understanding of the relationship between homicide and suicide as a matter of aggression predicated on measures of social integration. Homicide and suicide were further differentiated in one fundamental waybetween self and other-as "in suicide, the target of the aggression is the self. In homicide, the target of the aggression is another person" (1954, 101). Henry and Short saw a causal link between aggression and societal restraint. In their model less restraint was equated with an increased risk of suicide and decreased homicide and, more control-less freedom-was an indicator for high homicide and low suicide.

Based on an analysis of 1940s cross-sectional data on rates of homicide and suicide in twenty-one US states, each further broken down by region, Henry and Short concluded that both homicide and suicide were acts motivated by aggression with homicide precipitated by other-oriented aggression, and suicide being a form of self-directed aggression. As a result of this theoretical frame rates of homicide and suicide ought to be inversely proportional to each other based on the various levels of external social restraints.

Gold (1958) made use in his studies of homicide and suicide of a similar theoretical framework to that employed by

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Henry and Short, emphasizing the role of the individual in society as a marker of the form of violent death. Gold, however, perceived the question of the relationship between homicide and suicide as a psychological problem, thus distinguishing himself from his predecessors, Henry and Short, who believed sociological variables played an active role separate from psychological factors. For Gold, sociological factors formed the determinants of a psychological "choice" of direction of aggression-against oneself or another-. Gold pointed to pivotal child-rearing variables, such as the type of punishment employed by a parent, as a predictive variable of the direction of expression of aggression. The implication was that the relationship between parent and child was the crucial link between an individual's eventual choice of homicide or suicide. While Henry and Short utilized absolute rates of homicide and suicide, Gold constructed an SMR, or suicide-murder ratio, in which preference for homicide or suicide was measured as the individual rate over the sum of the combined rate of both homicide and suicide. This was perceived as a surer measure of preference and statistical significance. Careful consideration of "choice" was, as Gold suggested, a more appropriate way of handling the data than that employed by Henry and Short.

The idea that homicide and suicide can be explained analogously in terms of aggression, as put forth by Henry and Short and furthered by Gold, is suggestive of the notion that the two are mutually associated. Hentig (1948, 390) advanced this point: "murder and suicide are complementary phenomena: the total amount of available destructiveness is discharged in two psychologically similar, socially distinct Gestalten." Hentig's studies of victimhood provided a natural perspective by which to comprehend the motives behind homicide and suicide. Wolfgang (1959) utilized Hentig's general theories on victimization to provide another parallel between the notion of homicide and suicide. He theorized that many homicides were victim-precipitated: the result of a victim's unconscious desire to commit suicide. Such a theory, both enlightening and controversial, presents difficulties in distinguishing between the two forms of death. Schaefer (1968) further obfuscated the issue by proposing a concrete relation between the victims and offenders of the two forms of death, implicating both victim and offender in the crime.

Unnithan and colleagues also championed the ideas of Henry and Short. In *The Currents of Lethal Violence*, Unnithan, Huff-Corzine, Corzine, and Whitt (1994) revitalized the ideas of Henry and Short by arguing in favor of the stream analogy or integrated model: that homicide and suicide are alternate and causal forms of violent death that depend on the forces of production (cultural and societal factors that indicate the amount of lethal violence) and direction (the cultural and societal factors driving the form of violence). Both Wu (2003), in looking at regional rates of homicide and suicide in the United States, and Batton (1999) in studying historical rates of death in the United States, provided moderate support for the stream analogy theory, and the notion that homicide and suicide may share common social causes.

Wu's (2003) research supports the idea that forces of production explain the degree of lethal violence. There is less analytical support provided to connect social and cultural forces of direction to whether violence will be expressed as homicide or suicide. The one variable having the strongest connection with the degree of violence was infant mortality. Thus, forms of violent death are intrinsically related to other forms of mortality. This relationship Wu perceives may have its underpinnings in larger social issues: namely poverty.

Batton (1999) conducted a temporal analysis of the relationship between homicide and suicide and found that variables related to external sources of blame (such as rates of alcohol use, immigration and divorce rates) correlated with homicide.

While Henry and Short, Wu, and Batton focused on the United States, several researchers have extended the framework to other countries, with mixed results (Lester 1996; Reza, Mercy, and Krug 2001). Studying suicide in fifty-four non-literate societies, Palmer (1971) found that suicide rates were associated with other forms of aggression such as homicide, assaults, and dueling. Again, this is an indication that homicide and suicide are positively correlated. Other international studies reported contradictory findings.

Lester documented patterns of suicide and homicide in the United States (1994) and globally (1996). In the United States, Lester examined numerous social variables, including geography, and found suicide to be related to interstate migration and highest in the northeastern United States, whereas homicide rates were far higher among southern states. Globally, Lester analyzed sixty-five social variables associated with violent death and found twenty of them had opposite effects on homicide and suicide (Lester 1996). While Lester's analysis provides some support for understanding homicide and suicide concurrently, he does not provide an intrinsic theoretical argument for studying the two together.

Thomson (1980) discussed accounts of homicide and suicide among the Xhosa tribe in South Africa and compared rates among the Xhosa with those in Britain. He found that homicide rates were sixty-nine times higher amid the Xhosa than in Britain, and suicide rates were three times higher in Britain, as compared to the Xhosa. Based on earlier studies indicating direction of violence and social cohesion, Thomson concluded that the "primitive development" of the Xhosa was reason for the difference. An alternative perspective toward understanding the relationship between homicide and suicide was established through ethnographic studies in Africa. Bohannan (1966) disagreed with the position and perspective of Henry and Short, favoring instead the descriptive analysis of cultural patterns as a way of understanding patterns of violent death, not merely as differences between "primitive and non-primitive societies" as argued by Thomson.

Contemporary research into the relationship between homicide and suicide has often focused on particular variables, or on a particular context. A natural setting for violence is armed conflict. Several authors – Henry and Short (1954), Marshall (1981), and Archer and Gartner (1976) – have noticed increased homicides in conjunction with decreased suicides during times of war, though rising suicides during wartime have also been reported in some Asian cultures. Desjarlais, Eisenberg, Good, and Kleinman (1995) pointed to the profound effects of violence and social upheaval on rates of suicide in Sri Lanka. In 1991, Sri Lanka, in the midst of a civil war, recorded the highest rates of suicide of any country at that time. Pinguet (1993), who calls attention to increased numbers of suicides in Japan during and just preceding World War II, also shares such a perspective. Although Japan is widely referred to as a "suicide nation," current rates of suicide there are similar to European countries. The complex relationship between war and suicide may reflect in part the varying effects of conflict on attitudes toward death and dying in different societies and cultures. Utilizing death rates from 1950–1990 in the Republic of Ireland and Northern Ireland, McKenna, Kellerher, and Corcoran (1997) found that homicide and suicide were positively related before and after armed conflict, though inversely related during times of war-like situations. Overall, though, there are very few comparative studies that look at the relationship between homicide and suicide temporally before, during, and after episodes of armed conflict.

Porterfield (1960) implicated homicide and suicide rates within the context of traffic, and found both forms of death correlated with traffic fatality rates in urban areas. He suggested that persons involved in each were similar in not having concern for life, either theirs or others'. Porterfield conveys the sense that homicide and suicide are positively correlated, a viewpoint that is also shared by others (Lester 1994; Brenner 1971; Klebba and Dolman 1975). Holinger (1980, 1987) noted that patterns of homicide and suicide rates in the United States tended to fluctuate comparably over time, thus contradicting the popular view that homicide and suicide were inversely related. However, it should be noted that Holinger used national mortality data over time, whereas Henry and Short's study was based on cross-sectional data.

Suicide and homicide are both seen as related in that, "all may represent some expression of self-inflicted mortality" (Holinger 1987, 5). The understanding that both are antithetical to cultural norms and that each involve some element of selfdestruction (in regards to both the killer and the individual killed)—there is some evidence suggesting that many homicides are victim-precipitated and represent suicides—has provided the stimulus to show that homicide and suicide are not unrelated and that one should consider them in aggregate, as a summation of deaths (Freud 1946; Holinger and Klemen 1982; Wolfgang 1968).

Forms of violent death were also confounded by the occurrence of homicides followed directly by suicides (homicidesuicide). Unlike other forms of killing, homicide-suicide often occurred as a single or continuous act and the action often stemmed from similar motives (Adler 1999). Furthermore, homicide-suicides were motivated by strong emotional ties, thus confirming the literary notion that to lie together is to die together. West (1965) looked at 148 homicides followed by suicides and compared them to 148 cases of just homicide and found noticeable differences in the context of violence. Occurrences of homicide-suicide do not fit neatly within common understandings of homicide and suicide as polar opposites or mutual substitutes (Pokorny 1968) nor can they be explained by external-internal responses to frustration, as put forth by Henry and Short (1954) and Gold (1958).

5. Discussion

Violent death is recognized as an important public health issue. A recording of history provides a larger context by which to understand the competing theories and empirical research on the topic of homicide and suicide. Texts on the subject are extremely diverse, and at times provide conflicting and contradictory conclusions on the two forms of violent death. Though seemingly disparate views may appear antithetical, they each point to a component of the relationship or possible connection between homicide and suicide. Over time various theoretical frames, from theology, sociology, anthropology and criminology, have been used to explain discordant data. With time certain perspectives have held more influence over others, driving social approaches and legal responses to individuals engaged in violent death.

Current understanding of the relationship between homicide and suicide is primarily dictated by Unnithan's (1994) understanding of stream analogy. The stream analogy posits that acts of homicide and suicide arise from a common source of violence. The amount of lethal violence is controlled by societal forces of production acting on an individual, with the direction of these forces determining the direction of violence, as against oneself or against another. The stream analogy model, or integrated model, assumes that an individual's position and relationship with and within a larger societal framework is what drives violent forms of death.

The World Health Organization's definition of violence (2002, 5) as:

The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation

is rooted in this conceptual framework, but does not make mention of the motivations or the context of actions. The deliberate decision to end one's life or the life of another is not simply a matter of choice or of preference, but the result of multiple social and structural factors.

The discordant and at times conflicting understandings of homicide and suicide derive from a society's continual attempt to understand what would cause someone to want to kill himself/herself or another person. While the stream analogy is grounded in a social narrative, it does not emphasize the interconnectedness of individual and society.

Moreover, social forces are complex. The stream analogy also implies that homicide and suicide arise from the same social forces. However, other accidental forms of violence, as described by Lane (1979), that are not integrated into the stream analogy, may also be related to the same social conditions that affect homicide and suicide rates. Perhaps a more fitting analogy for understanding the various mechanisms affecting acts of violence would be the spokes of a wheel feeding into a central hub. While the stream analogy suggests a linear process, the hub and spoke analogy provides a framework for imagining the multidirectional forces at work on individual decisions around violence, including the interrelationships between differing forms of violence and their various connections to larger social and cultural variables.

Unnithan's distinction between forces of production and force of direction is also problematic. The understanding and categorization of these two separate forces in the larger violence literature is not as concrete. For example, Batton (1999) treated economic deprivation as a force of direction and Whitt (1994) treated the variable as a force of production.

Future research implicating social forces on the relationship between homicide and suicide may benefit from two developments: 1. more elaborate classification systems and 2. more robust systems of data collection. There is a trend toward developing both. In the past, correlative studies as well as national and international databases tracking homicide and suicide statistics have been slow to categorize death more specifically. Historically, homicide can be defined further as either unlawful or lawful, with the former being further defined in English law into four categories: murder, manslaughter, child destruction, and infanticide (Mohanty 2004).

More recently, the United Nations (2013) released the *Global Study on Homicide 2013,* in which violent death was classified as 1. related to larger conflicts, 2. self-inflicted, and 3. non-conflict deaths. Non-conflict deaths could be further delineated as intentional homicide (among other categories) and further sub-categorized as related to criminal activities, interpersonal and socio-political. Subcategorizing various forms of violent death more specifically may help to clarify the larger social determinants of violence. Recognition of the social determinants of violent death expands on the theoretical basis of the stream analogy and more adequately reflects the relationship of individual intention to larger aspects of geopolitical, cultural, and social structures.

Disparate conclusions on violent death may also stem from inherent problems in data collection. Most international data collection systems are derived from the criminal justice or public health systems. While significant effort is put into recording and investigating death statistics, data often lack additional variables regarding the intention around the violent act. While theories such as the stream analogy posit reasons for why individuals may kill themselves or others, data supporting those claims are often missing.

In the United States a more robust system of data collection has started with introduction of the National Violent Death Reporting System (NVDRS; Weiss, Gutierrez, Harrison, and Matzopoulos 2006). The NVDRS is a federally funded, state implemented surveillance system that links existing data from various collecting agencies including coroners, medical examiners, and police with vital statistics. Prior to NVDRS, public health agencies relied primarily on death certificates for injury mortality surveillance. The overall aim is to improve access, quality, and specificity of fatal violence data.

More specific classification and surveillance systems may provide insight into the cultural, psychological, biomedical, religious, sociological, and anthropological understandings of the relationship between the many forms of homicide and suicide, and lead to a more robust understanding of the relationship between the two forms of death. In the end a more refined understanding of the various forms in which homicide and suicide take place will provide further support for evidence-based strategies to combat violent death.

References

Adler, Jeffrey S. 1999. If We Can't Live in peace, We Might as Well Die: Homicide-Suicide in Chicago, 1875–1910. *Journal of Urban History* 26 (1): 3–21.

Allen, Thomas E. 1967. Suicidal Impulse in Depression and Paranoia. *International Journal of Psycho-Analysis* 48 (3): 433–38.

Archer, Dane, and Rosemary Gartner. 1976. Violent Acts and Violent Times: A Comparative Approach to Postwar Homicide Rates. *American Sociological Review* 41 (6): 937-963.

Åsberg, Marie, Lil Traskman, and Peter Thoren. 1976. 5-HIAA in the Cerebrospinal Fluid: A Biochemical Suicide Predictor? *Archives of General Psychiatry* 33 (10): 1193-7.

Augustine, Saint, Bishop of Hippo. 1940. *The City of God.* (trans. J Healey) Toronto: J. M. Dent.

Batton, Candice. 1999. *The Stream Analogy: A Historical Study of Lethal Violence Rates from the Perspective of the Integrated Homicide-Suicide Model.* Dissertation. Nashville: Vanderbilt University.

Bills, Corey B., and Guohua Li. 2005. Correlating Homicide and Suicide. *International Journal of Epidemiology* 34 (4): 837-45.

Bohannan, Paul. 1966. *African Homicide and Suicide*. Princeton, NJ: Princeton University Press.

Brenner, Harvey M. 1971. *Times Series Analysis of Relationships Between Selected Economic and Social Indicators*. Springfield, VA: National Technical Information Service. Browne, Thomas. 1643. *Religio Medici.* [The Religion of a Doctor]. http://penel-ope.uchicago.edu/relmed/relmed.html

Bynum, Caroline Walker. 1987. *Holy Fast and Holy Feast: The Religious Significance of food to medieval women.* Berkeley: University of California Press.

Charleton, Walter. 1668; reprint 1975. *The Ephesian Matron*. Los Angeles: Augustan Reprint Society.

Colaizzi, Janet. 1989. *Homicidal Insanity, 1800-1985.* Tuscaloosa: The University of Alabama Press.

Datta, Vishwa Nath. 1988. *Sati: A Historical, Social and Philosophical Enquiry into the Hindu Rite of Widow Burning.* Riverdale, MD: The Riverdale Company.

Desjarlais, Robert, Leon Eisenberg, Byron Good, and Arthur Kleinman. 1995. World Mental Health. London: Oxford University.

Donne, John. 1631. *Biathanatos: A Declaration of the Paradoxe, or Thesis, that Selfe-Homicide is not so Naturally Sinne, that it May Never be Otherwise*. Ann Arbor, MI: University Microfilms International.

Durkheim, Emile. 1897. *Suicide: A Study in Sociology*. (trans. Spaulding, J. & Simpson, G. 1951.) Glencoe, IL: Free Press.

El Sarraj, Eyad. 2002. Suicide Bombers. *Journal of Palestine Studies* 31 (4): 71–76. Erb, Martin, Sheilagh Hodgins, Roland Freese, Rudiger Muller-Isberner, and Dieter Jockel. 2001. Homicide and Schizophrenia: Maybe Treatment Does Have a Preventive Effect. *Criminal Behavior and Mental Health* 11 (1): 6–26.

Esquirol, Etienne. 1965. *Mental Maladies: A Treatise on Insanity*. New York: Hafner Publishing Co.

Fazel, Seena, and Martin Grann. 2004. Psychiatric Morbidity Among Homicide Offenders: A Swedish Population Study. *American Journal of Psychiatry* 161 (11): 2129-31.

Foucault, Michel. 1973. *Madness and Civilization: A History of Insanity in an Age of Reason.* New York: Vintage Books.

Freud, Sigmund. 1946. *Totem and Taboo: Resemblances Between the Psychic Lines of Savages and Neurotics*. NY: Vintage.

Freud, Sigmund. 1947. The Ego and the Id. London: The Hogarth Press.

Freud, Sigmund. 2004. *On Murder, Mourning and Melancholia.* London: Penguin Books Ltd.

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Gold, Martin. 1958. Suicide, Homicide and the Socialization of Aggression. *The American Journal of Sociology* 63(6): 651-61.

Guerry, Andre-Michel. 1833. *Essai sur la Statistique Morale de la France*. [Essay on the Moral Statistics of France]. Paris: Crochard.

Havens, Leston. 1965. The Anatomy of a Suicide. *New England Journal of Medicine* 272: 401-6.

Hentig, Hans. 1948. The Criminal and his Victim. New Haven: Yale University Press.

Henry, Andrew, and James Short. 1954. *Suicide and Homicide: Some Economic, Sociological and Psychological Aspects of Aggression.* London: The Free Press of Glencoe, Collier-Macmillan Limited.

Holinger, Paul. 1980. Violent deaths as a Leading Cause of Mortality: an Epidemiological Study of Suicide, Homicide and Accidents. *Psychiatry* 137 (14): 472-6.

Holinger, Paul, and Elaine Klemen. 1982. Violent Deaths in the United States, 1900-1975. *Social Science and Medicine* 16 (22): 1929-1938.

Holinger, Paul. 1987. Violent Deaths in the United States. New York: Guilford Press.

Klebba, Joan, and Alice Dolman. 1975. Comparability of Mortality Statistics for the Seventh and Eighth Revisions of the International Classification of Diseases, United States. *Vital and Health Statistics* 1 2 (66): 1-93.

Lane, Roger. 1979. Violent Death in the City. Cambridge, MA: Harvard University Press. Lester, David. 1996. *Patterns of Homicide and Suicide in the World*. Commack, New York: Nova Science Publishers, Inc.

Litman, Robert, and Charles Sweringen. 1972. Bondage and Suicide. Archives of General Psychiatry 27 (1): 80-5.

MacDonald, Michael and Terence Murphy. 1990. *Sleepless Souls: Suicide in early mod*ern England. New York: Oxford University Press.

Marshall, James. 1981. Political integration and the effect of war on suicide: United States, 1933-76. *Social Forces* 59 (3): 771-785.

McKenna, Caroline, Michael Kellerher, and Paul Corcoran. 1997. Suicide, Homicide and Crime in Ireland: What are the Relationships? *Archives of Suicide Research* 1 (3): 53-64.

Minois, Georges. 1999. *History of Suicide: Voluntary Death in Western Culture*. (trans. Lydia Cochrane) Baltimore: The Johns Hopkins University Press.

Mohanty, Manoj K. 2004. Variants of Homicide: A Review. *Clinical Forensic Medicine* 11(4): 214-8.

Morselli, Enrico. 1879. *Il Suicidio: Saggio di Statistica Morale Comparata.* [Suicide : An Essay on Comparative Moral Statistics]. New York: Appleton and Co.

Oxford English Dictionary. 2004. Oxford English Dictionary Online. www.oed.com.

Palmer, Stuart. 1971. Characteristics of Suicide in 54 Nonliterate Societies. *Suicide and Life-Threatening Behavior* 1(3): 178-83.

Palmer, Stuart. 1972. *The Violent Society*. New Haven: College and University Press. Pinguet, Maurice. 1993. *Voluntary Death in Japan*. Cambridge, MA: Polity Press.

Pokorny, Alex D. 1968. Human Violence: A Comparison of Homicide, Aggravated As-

sault, Suicide, and Attempted Suicide. *Journal of Criminal Law and Criminology* 56(4): 488-497.

Porterfield, Austin. 1960. Traffic Fatalities, Suicide and Homicide. *American Sociological Review* 25 (6): 897-901.

Reza, Avid, James A Mercy, and Etienne Krug. 2001. Epidemiology of violent deaths in the world. *Injury Prevention* 7 (2): 104-111.

Schaefer, Stephen. 1968. Victimology: The Victim and his Criminal. New York: Random House.

Settar, S. 1989. *Inviting Death: Indian Attitude Towards the Ritual Death*. New York: E.J. Brill.

Shaw, Jenny, Louis Appleby, Tim Amos, Ros McDonnell, Catherine Harris, Kerry McCann, Katy Kiernan, Sue Davies, Harriet Bickley, and Rebecca Parsons. 1999. Mental Disorder and Clinical Care in People Convicted of Homicide: National Clinical Survey. *British Medical Journal* 318 (7193): 1240-4.

Schneidman, Edwin. 1985. Definition of Suicide. New York: John Wiley and Sons.

Spurzheim, Johann. 1817. *Observations on the Deranged Manifestations of the Mind, or Insanity*. Boston, MA: Marsh, Capon and Lyon.

Thomson, I.G. 1980. Homicide and Suicide in Africa and England. *Medicine, Science and Law* 20 (2): 99-103.

Tissot, Joseph. 1840. *De la Manie du Suicide et de L'esprit de Revolte, de leurs Causes et de leurs Remèdes* [Suicide Mania and the Spirit of Revolt, their Causes and their Remedies]. Paris: Ladrange.

United Nations Office on Drugs and Crime. 2013. Global Study on Homicide 2013: Trends, Contexts, Data. Vienna, Austria: United Nations Office on Drugs and Crime.

Unnithan, Prabha, Lin Huff-Corzine, John Corzine, and Hugh Whitt. 1994. *The Currents of Lethal Violence: An Integrated Model of Suicide and Homicide*. Albany, NY: State University of New York Press.

Verkko, Veli. 1951. Homicide and Suicide in Finland. Copenhagen: C.E.S. Gads Verlag.

Walendzik, H, G Zimmer, and G Skopp. 2000. Serotonin, 5-hydroxyindolylacetic Acid and Cholesterol Content in Blood, Cerebrospinal Fluid and Brain Areas for Differentiation of Suicidal from Non-suicidal Cause of Death. *Arch Kriminol* 205 (5-6): 131-44.

Weiss, Harold, Maria Isabel Gutierrez, James Harrison, and Richard Matzopoulos. (2006).The US National Violent Death Reporting System: domestic and international lessons for violence injury surveillance. *Injury Prevention* 12 (Suppl II): ii58-ii62

West, Donald James. 1965. *Murder Followed by Suicide*. London: Heinemann Educational Books Ltd.

Whitt, Hugh. 1994. Old theories never die. In *The Currents of Lethal Violence: An Integrated Model of Suicide and Homicide,* ed. N. Prabha Unnithan, 7-34. Albany, NY: State University of New York Press.

Wolfgang, Marvin. 1959. *Patterns in Criminal Homicide*. Philadelphia: University of Pennsylvania Press.

World Health Organization (WHO). 2002. World Report on Violence and Health. Geneva: WHO.

World Health Organization (WHO). 2008. *The Global Burden of Disease: 2004 Update.* Geneva, Switzerland: WHO.

Wu, Bohsiu. 2003. Testing the Stream Analogy for Lethal Violence: A Macro Study of Suicide and Homicide. *Westem Criminology Review* 4(3): 215-225.