

Of Knives and Bones: Philippine Practice of English Forensic Pathology

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I. INTRODUCTION

Honorary Clinical Fellowship in English Forensic Pathology was a training program offered to Filipinos by the British Magistrate in 2006.¹ The word “English” is a distinction from the American methods that Filipino practitioners of legal medicine and forensic medicine are accustomed to.

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1. This training program used to be offered by the University of Leicester in the United Kingdom.

While American textbooks, which are used in Philippine medico-legal training, uphold the use of “comprehensive” autopsy in characterizing death as to cause, manner, and mechanism,² the English books retain options that are in the realm of coroner practice. The word “comprehensive” also appears in British books,³ but the fellowship training impresses that “complete” is a better word. Completing an autopsy requires meeting the objectives of the procedure.⁴ In the Philippines, pathologists, on one hand, who adhere to textbooks, always characterize death. On the other hand, Philippine National Police (PNP) medico-legal officers, who are mostly not

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2. One of these American textbooks is Spitz and Fisher’s *Medicolegal Investigation of Death: Guidelines for the Application of Pathology to Crime Investigation*. DANIEL J. SPITZ & RUSSELL S. FISHER, *SPITZ AND FISHER’S MEDICOLEGAL INVESTIGATION OF DEATH: GUIDELINES FOR THE APPLICATION OF PATHOLOGY TO CRIME INVESTIGATION* (Werner U. Spitz & Daniel J. Spitz eds., 2006).
 3. One of these British textbooks is *Knight’s Forensic Pathology*, which mentions that the “report of a forensic autopsy becomes a legal document of possibly vital significance, and every effort must be made at the time to make it as *comprehensive* and useful as possible.” PEKKA SAUKKO & BERNARD KNIGHT, *KNIGHT’S FORENSIC PATHOLOGY* 33 (2004 ed.) (emphasis supplied).
 4. The objectives of an autopsy [may include any of the following]:
 - (1) To make a positive identification of the body and to assess the size, physique[,] and nourishment[;]
 - (2) To determine the cause of death or, in the newborn, whether live birth occurred[;]
 - (3) To determine the mode of dying and time of death, where necessary and possible[;]
 - (4) To demonstrate all external and internal abnormalities, malformations[,] and diseases[;]
 - (5) To detect, describe[,] and measure any external and internal injuries[;]
 - (6) To obtain samples for analysis, microbiological and histological examination, and any other necessary investigations[;]
 - (7) To retain relevant organs and tissues as evidence[;]
 - (8) To obtain photographs and video for evidential and teaching use[;]
 - (9) To provide a full written report of the autopsy findings[;]
 - (10) To offer an expert interpretation of those findings[; and]
 - (11) To restore the body to the best possible cosmetic condition before release to the relatives.

Id. at 3.

as completely trained as pathologists, limit the purpose of most of their forensic autopsies to the determination of the cause of death.

Informal discussions throughout the Author's early career with members of the Medico-Legal Division of the National Bureau of Investigation (NBI) and the Philippine Commission on Human Rights uncovered that such people tend to follow an autopsy protocol derived from the University of Minnesota.⁵ The Minnesota Protocol is advocated by the United Nations.⁶ In one of its sections, it outlines what must be done during, or how to do, an autopsy.⁷ Adherence to this process and completion of procedures define a comprehensive autopsy. However, it skips the lengthier technical discussion of how to perform the techniques in autopsy. A concise discussion on some of the differences is entertained by Pekka Sauko and Bernard Knight in the book entitled *Forensic Pathology*,⁸ and by Jason Payne-James, Anthony Busuttil, and William Smock in *Forensic Medicine: Clinical and Pathological Aspects*.⁹

The forensic autopsy in the United States (U.S.) and the Commonwealth members includes external and internal examinations of the body, which is similar to one type of autopsy in the English system.¹⁰ The English system recognizes the validity of other autopsy methods depending

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5. Jennifer Prestholdt, The Minnesota Protocol: Creating Guidelines for Effective Investigations, *available at* https://theadvocatespost.org/2016/02/26/minnestota_protocol (last accessed May 12, 2017). The “necessity for international standards and guidelines for death investigations” became apparent to a group of lawyers in Minnesota, in light of the “lack of accountability for the 1983 assassination of Senator Benigno S. Aquino, Jr. in the Philippines and many other suspected unlawful deaths happening in the world.” *Id.*
 6. See United Nations Human Rights Office of the High Commissioner, Revision of the UN Manual on the Effective Prevention and Investigation of Extra-Legal, Arbitrary and Summary Executions (the Minnesota Protocol) *available at* <http://www.ohchr.org/EN/Issues/Executions/Pages/RevisionoftheUNManualPreventionExtraLegalArbitrary.aspx> (last accessed May 12, 2017). The guidelines were adopted by the United Nations in 1991. Prestholdt, *supra* note 5.
 7. United Nations Manual on the Effective Prevention and Investigation of Extra-Legal, Arbitrary and Summary Executions, ¶ IV (B) (2), U.N. Doc. E/ST/CSDHA/.12 (1991).
 8. SAUKKO & KNIGHT, *supra* note 3.
 9. FORENSIC MEDICINE: CLINICAL AND PATHOLOGICAL ASPECTS (Jason Payne-James, et al. eds., 2003).
 10. See ANDREW J. CONNOLLY, ET AL., AUTOPSY PATHOLOGY: A MANUAL AND ATLAS 33-36 (3d ed. 2016). Connolly, et al., are California-based doctors. *Id.*

upon the circumstances: “view and grant,”¹¹ “Rokitansky,”¹² blocked exenteration (Ghon or Letulle),¹³ and full postmortem examination (Virchow).¹⁴

Table 1 shows some of the advantages of English forensic autopsy, that is: (1) acceptability of methods that expand cultural and religious sensitivities; (2) less morbid Y-incision that allows adequate neck and face dissections; (3) technically easier techniques to access the posterior body cavity; and (4) techniques of extensive dissection that allows good cosmetic repair.

Table 1. Short Comparison of American and English Autopsy Methods

MEDICAL FORENSIC SYSTEM	U.S. MEDICAL EXAMINER SYSTEM	ENGLISH FORENSIC SYSTEM
Acceptable techniques	One method (variations of the Ghon, Letulle, and Virchow Methods)	Spectrum of methods (view and grant through invasive and non-invasive autopsy methods)
Y-incision	Around the thorax	Around the neck
Neck dissection	Allowed; Debilitating and difficult repair	Allowed; More acceptable cosmetic repair
Face dissection	Not allowed	Allowed
Posterior cavity dissection	Anterior approach of the spine	Allowed posterior approach of the spine

11. View and grant examination is a systemic external examination prior to the evisceration and internal examination. It is a minimally invasive autopsy procedure. Guy N. Rutty, *The external examination*, in *THE HOSPITAL AUTOPSY: A MANUAL OF FUNDAMENTAL AUTOPSY PRACTICE* 90 (Julian L. Burton & Guy N. Rutty eds., 2010) & Guy N. Rutty & Julian L. Burton, *The evisceration*, in *THE HOSPITAL AUTOPSY: A MANUAL OF FUNDAMENTAL AUTOPSY PRACTICE* 134 (Julian L. Burton & Guy N. Rutty eds., 2010).

12. JOHN J. MILETICH & TIA LAURA LINDSTROM, *AN INTRODUCTION TO THE WORK OF A MEDICAL EXAMINER: FROM DEATH SCENE TO AUTOPSY SUITE* 101 (2010).

13. JURGEN LUDWIG, *HANDBOOK OF AUTOPSY PRACTICE* 3 (3d ed. 2002).

14. MILETICH & LINDSTROM, *supra* note 12, at 101.

MEDICAL FORENSIC SYSTEM	U.S. MEDICAL EXAMINER SYSTEM	ENGLISH FORENSIC SYSTEM
Ano-vaginal exanteration	Not necessary	Allowed
Endocrine organs	Removed and dissected	Dissected and samped <i>in situ</i>
Cultural sensitivity	Low	High
Religious respect	High	High
Sensitivity to Jewish culture	Moderate	High
Sensitivity to Moslem culture	Low	High
Sensitivity to Christian culture	High	High
Sensitivity to Asian culture	Low	High

A. View and Grant (External Examination)

View and grant is an acceptable non-invasive postmortem examination in Scotland and in many parts of England.¹⁵ It is largely associated with the “coroner system.” An English coroner may or may not be a physician, and part of his tasks is to see cases of death and determine the need for further investigation.¹⁶ In many cases of death, where pre-mortem data is good and scene investigation is adequate, an inspection or external examination of the corpse may be adequate to determine the cause of death. It is equivalent to the external examination of the American autopsy process and the reference to “postmortem” in Philippine jurisprudence, although non-pathologists may be performing it less diligently. External examination demands the examination of clothing, all articles contiguous with the body, skin surfaces and appendages, and body orifices.¹⁷ Religious and cultural inclinations may

15. Julian L. Burton, *The History of the Autopsy*, in *THE HOSPITAL AUTOPSY: A MANUAL OF FUNDAMENTAL AUTOPSY PRACTICE 1* (Julian L. Burton & Guy N. Ritty eds., 2010).

16. SAUKKO & KNIGHT, *supra* note 3, at 2.

17. *Id.* at 11-16.

favor this method over the succeeding methods to be discussed. Some Chinese families may not allow the removal of red clothing from their decedent. Filipino Moslem practitioners may not allow even the touching of their dead by inappropriate people. A view and grant autopsy protocol makes an inexpensive and culturally-sensitive repertoire for medico-legal examinations.

B. Rokitansky Technique (In Situ Autopsy)

The Rokitansky technique is the first mildly invasive autopsy set of procedures. After the external examination, the anterior body cavity is opened and the internal organs are examined in their places (*in situ*).¹⁸ The internal organs are exposed, but not moved, for observation from a single middle incision in front of the body. From the writing of his students, the Baron Carl von Rokitansky of Bohemia, a physician, prosecutor, and professor of medicine, has been attributed with a prolific record of performing and/or supervising more than 100,000 autopsies using the technique that bears his name.¹⁹ The method sits well with cultures that do not allow the removal of organs from the body. Early critics recommend taking away some organs to show the deeper organs from this anterior approach.²⁰ In cases of very advanced state of decomposition, a "Rokitansky" may be the only available remaining technique for matted or liquefied organs.

C. Autopsy with En-bloc Organ Exenteration

An adequate examination of internal organs will require that the pieces be examined in its entirety in all its surfaces. The removal of anterior organs may be done in one or two blocks.²¹ The single-block removal (misnamed Rokitansky in some early textbooks) takes into consideration the coelomic nature of organs hanging from a simple posterior attachment to the body cavity. When this attachment is severed, then all organs from the base of the neck down to the pelvic cavity can be released with one pull. A more

18. CONNOLLY, ET AL., *supra* note 10, at 6.

19. Burton, *supra* note 15, at 6.

20. The early critics of Carl von Rokitansky include his unnamed students, who attributed the great number of autopsies and description of autopsy methods to him. Literature is sparse and authority is mostly ascribed. The same criticism exists today. However, Rokitansky autopsy method may find other definitions and descriptions in some textbooks.

21. See CONNOLLY, ET AL., *supra* note 10, at 33.

delicate technique is to separate the removal of organs above and below the diaphragm in separate blocks. The orientation of the organs with each other is retained when they are removed in this manner. Organs are also cut to examine the internal surfaces.

D. Systematic and Systematized Autopsy Method

Rudolf Virchow, the father of modern pathology,²² has espoused the removal of all body organs for complete examination, and the collection of tissues for histopathologic studies. The technique requires opening of both the anterior (thorax and abdomen) and the posterior (cranial and spinal) body cavities.²³ Modifications are varied from one institution to another. Some will remove organs one by one,²⁴ like in the PNP Crime Laboratory's Medico-Legal Division version, or system-wise, like in the Leicester Royal Infirmary (LRI) Forensic Pathology Unit.

II. ENGLISH FORENSIC AUTOPSY
(LEICESTER ROYAL INFIRMARY AUTOPSY)

A complete forensic autopsy at the LRI Forensic Pathology Unit, which was headed by Professor Guy N. Ruty,²⁵ combines both invasive and non-invasive methods of autopsy. It starts with the comprehensive external examination and documentation of clothing, artefacts, injuries, defects, and pathology in all skin surfaces (in the order of anterior, intertriginous, and posterior). Hair may be removed. Intertriginous areas are exposed. Palpation is necessary in thick and recessed areas.

Favoring economy of movement and speed, posterior dissection is completed first. The posterior approach affords an easy removal of the brain and spinal cord, if necessary, and preserves the integrity of the vertebral bodies (back bone). The anterior approach leaves the body with an easily-dislodged spine. The inner and middle ear cavities are also accessed in suspicion of tumor or trauma, or for a clean, osseous Deoxyribonucleic Acid (DNA) source. The skin can also be splayed as necessary for deep tissue injury.

22. Burton, *supra* note 15, at 6.

23. CONNOLLY, ET AL., *supra* note 10, at 45-53.

24. *Id.* at 33.

25. University of Leicester, Guy Ruty, *available at* <http://www2.le.ac.uk/departments/engineering/news/2012/forensics2012/speakers/ruty> (last accessed May 12, 2017).

The anterior dissection starts when the body is turned supine.²⁶ The neck is dissected and then the face. The strap muscles are divided across their bellies and examined for contusions and trauma.²⁷ The blood vessels are opened to look for luminal obstructions. Some argue that the face dissection must only be done in the presence or suspicion of tumor or trauma.

The midline incision from the base of the neck is continued to the base of the pelvis.²⁸ The organs are then removed per system, as in: the airways and the lungs; the heart and the major blood vessels; the gastrointestinal tract from the esophagus to the rectum; the kidneys, ureter, and urinary bladder; the liver and gall bladder; and, the spleen. Removing the organs together in a system retains their orientation with each other within that system. Most of the endocrine organs are examined and dissected in their places (*in situ*).

Tissues and body fluids are collected for histopathology and toxicology. The specialized technique of anogenital exaneration may be performed when indicated, like in looking for evidence in unresolved issues in suspicion of sexual abuse. Long bones are exposed with full thickness elliptical incision that lifts the anterior (usually) or posterior (if needed) compartments. Thirteen towels and gravity are used to prevent any tissue or blood loss in Jewish autopsies (histopathology and toxicology samples are also not retained for more than necessary and returned after adequate documentation).

The LRI autopsy takes about 90 minutes to perform, when uninterrupted.

A. Non-invasive Autopsy Methods

Aside from view and grant, English Forensic Pathology in LRI ushers virtopsy. This is also known as digital autopsy. Forensic pathologists and forensic radiologists engage in a double-doctor set-up to examine and diagnose autopsy cases with x-rays, computed tomography (CT) scan, and magnetic resonance imaging (MRI). In 2006, LRI was involved in the use of the CT scan as a non-invasive three-dimensional renderer of the surface and

26. See Rutty & Burton, *supra* note 11, at 116.

27. See Julian L. Burton & Guy N. Rutty, *Dissection of the internal organs*, in *THE HOSPITAL AUTOPSY: A MANUAL OF FUNDAMENTAL AUTOPSY PRACTICE* 154 (Julian L. Burton & Guy N. Rutty eds., 2010).

28. *Id.*

insides of a cadaver.²⁹ In the Southeast Asian region, a Malaysian company, iGene, spearheaded the effort to make tie-ups with the British Medico-Legal Center in Sheffield.³⁰ English Forensic Pathology, therefore, is not averse to technology.

B. Reproducibility of Scientific Autopsy Results

Autopsies are closed with the final autopsy reports. The autopsy report mirrors the comprehensive consultant's report that includes the general data, autopsy findings, ancillary findings, relevant illustrations and photographs, interpretations, discussions, and conclusions.³¹ Photography and videography in sensitive, sensational, and high-profile cases are highly recommended for the reproducibility of autopsy findings and results. Good imaging and histopathology slides can make re-autopsy unnecessary. The objective of images is to display the evidence in all perspectives necessary for the second examiner to arrive at his own independent interpretations and conclusions. Photography is customary in all autopsies, but must not be a hindrance in the performance of the process.

III. CASE-IN-POINT

To illustrate, the difference between American and English methods of conducting autopsies was demonstrated in the case of the disappearance of an American in the vicinity of the Banaue Rice Terraces, the body's eventual identification, and the characterization of death.³² The objectives of the autopsy are comprehensive — completing it will need both the identification of the deceased and the characterization of the death.

29. This is a description of the Author's experience in 2006, when he had been involved in 10 virtopsies. The method is young and iGene of Malaysia must have bought the rights and propriety.

30. Haroon Siddique, *UK's first digital autopsy centre opens in Sheffield*, *GUARDIAN*, Nov. 27, 2013, available at <https://www.theguardian.com/science/2013/nov/27/uk-first-digital-autopsy-centre-sheffield-postmortem> (last accessed May 12, 2017).

31. Guy N. Ruty, *Reports, documentation and statements*, in *THE HOSPITAL AUTOPSY: A MANUAL OF FUNDAMENTAL AUTOPSY PRACTICE* 324-25 (Julian L. Burton & Guy N. Ruty eds., 2010).

32. See Francie Grace, *Autopsy Shows Murder In Peace Corps Death*, available at <http://www.cbsnews.com/news/autopsy-shows-murder-in-peace-corps-death> (last accessed May 12, 2017).

A. Pre-Autopsy Conference

Julia Campbell, a U.S. Peace Corps volunteer, was reported missing by her colleagues in the Banaue Rice Terraces, Ifugao province, which triggered a local manhunt.³³ After about 10 days of disappearance, a body was chanced upon and was dug up from a place that was considered off the trail from where she was known to trek.³⁴ Suspicions were very high that the body was that of the Campbell. The body was airlifted to Manila for a joint examination of experts,³⁵ which included an American assistant medical examiner (a U.S. Armed Forces forensic pathologist), an American forensic anthropologist, and an American forensic photographer. They were present to observe and to aid, if necessary, in the examination and identification processes. They were also asked to obtain custody of the body if it were proven to be that of an American.

B. Philippine Autopsy

The Philippine team, which was assembled by then PNP Crime Laboratory Director Arturo G. Cacdac, Jr., was led by this Author, who examined the body using the protocols for an unidentified cadaver and techniques in English Forensic Pathology.³⁶ The initial part of the examination is similar in both American and English autopsy methods. The body and clothing were examined for signs of violence and artefacts that may characterize death. Photography and videography was used to document findings and the activities around the body. Lifting of fingerprints was attempted. Fingernails were collected. Further DNA samples were likewise collected from internal tissues. In hindsight, dactylography and DNA analysis were less helpful due to the advanced decomposition of the body.

The changes in the state of decomposition presented a rounded, bloated, and damaged face. This image is far from the supplied photograph of the Campbell. The Filipino impulse to incise the cheeks in order to gather

33. *Id.*

34. *Id.*

35. The American contingent was based in Japan at the time and arrived in Manila to observe the autopsy. See Associated Press, Filipino Cops Eye Local Man in Death of American Peace Corps Volunteer, available at <http://www.foxnews.com/story/2007/04/19/filipino-cops-eye-local-man-in-death-american-peace-corps-volunteer.html> (last accessed May 12, 2017).

36. Grace, *supra* note 32.

odontologic evidence was abated by the team leader's promise of a better method.

At this point, the usual knowledge garnered from American textbooks is to proceed with anterior incisions, while the corpse is supine. The incisions are shaped like the letter Y,³⁷ with the superior legs coming from the tip of the shoulders and meeting at the bottom of the chest to continue as a single, midline incision down the symphysis pubis. These incisions lead to the front (anterior) cavities of the chest and abdomen for their content examination of the internal organs.³⁸

Also acceptable in the PNP medico-legal method is a single, midline incision from the base of the neck (suprasternal notch), down the symphysis pubis. This minimalist technique avoids unnecessary damage and additional energy in the effort to repair later the incisions of autopsy. In advanced stages of decomposition, internal organs usually deteriorate to matting, which makes their distinctions very difficult to identify. Postmortem changes can even make histopathologic identification difficult as ghost cells from every organ become similar. Pathologic diagnosis can become impossible. Further efforts in advanced stages of decomposition may become efforts in futility, and a waste of resources, time, and energy.

At this stage of the autopsy process, the English Forensic Pathology method that Professor Rutty would require is the completion of the external examination while supine,³⁹ with each arm extended, and then while prone, going around the body in each position, using inspection and palpation as necessary. Autopsy incisions start from the back to splay the skin to look for deeper signs of injury from the nape to the buttocks. The procedure saves energy and time. It also affords an easier access and dissection of the cranial and spinal cavities. The contents of the posterior cavities can also be removed and examined as one.

The body is turned supine again for the anterior incisions and dissections. However, the English method starts with an incision around the neck and proceeds with the midline cut that crosses the suprasternal notch. This Y-incision around the neck demonstrates the economy of a cut similar to that of the PNP method and the proper exposure of the neck, with a good cosmetic repair letter.⁴⁰ Neck dissection opens the strap muscles in

37. See Rutty & Burton, *supra* note 11, at 116-17.

38. *Id.*

39. *Id.* at 116.

40. *Id.* at 118-19.

their tissue planes to look for tumor and trauma, and deep neck soft tissue for disease or risks.⁴¹ This technique also allows extension to dissect the face. Face dissection is indicated in tumor, trauma, and, in this case, as an aid for the decedent's identification.

Face dissection is the lifting of the facial skin and soft tissues from the bones.⁴² The edges of the cut circumscribe the field of interest as the neck incisions join the coronal incision of the scalp. The face dissection exposes the broken facial bones of the crushed face, releases the gases and fluids from the bloated decomposed face, allows cosmetic realignment of facial bones for reconstruction and identification, and permits excellent exposure of the jaw and teeth for odontologic examination and comparison with known data from the American Embassy.

C. Post-Autopsy Conference

Further histopathologic examination was deemed unnecessary by the team, due to the body's advanced state of decomposition, the completed characterization of death from the documented set of injuries and other articles, and the satisfactory identification of the American from odontologic matching and reconstructive resemblance with the available photograph. Other articles of clothing have also been consistent with known circumstances about the deceased.

One of the available methods at the time included decapitation and facial reconstruction, which is laborious and mutilating, but a highly convincing trial and error technique. The observers were prepared to process a severed head in their laboratory in case of this eventuality, but were satisfied that an alternative method could be pursued.

This showcase was impressive and contributed in the speedy resolution of the case, with the conviction of the suspect, and the immediate reparation of security and Philippine tourism in the Banaue Rice Terraces. However, acceptance of the process is met with cultural difficulty, even though neck and face dissections are highly recommended in trauma cases of those body regions. Minimalism, that is, the desire of the PNP medico-legal officers to exact the least amount of change to arrive at a diagnosis or relevant finding, makes them reluctant to use the knowledge to keep ahead of their specialty practice.

41. Ruddy & Burton, *supra* note 27.

42. See John A. McNulty, Face Dissection, *available at* http://www.lumen.luc.edu/lumen/MedEd/GrossAnatomy/dissector/labs/h_n/face/face.html (last accessed May 12, 2017).

IV. MEDICO-LEGAL PRACTICE
IN A PHILIPPINE SETTING OF LIMITED RESOURCES

Legal medicine is recognized as a core competency in Philippine medical education.⁴³ Its practice is mostly represented by the medico-legal officers of the PNP and the NBI.⁴⁴ Other claims to the practice come from some government health officers, doctor-lawyers, and physicians with pathology and forensic medicine training. A few have forensic pathology training.⁴⁵ Those who are still around boast of training from the United Kingdom (U.K.) (sent by the PNP) and Singapore (through the Philippine Society of

43. The Medical Act of 1959 enumerates the required subjects in a medical course which are —

The medical course shall be at least five years, including not less than [11] rotating internship[s] in an approved hospital, and shall consist of the following subjects:

Anatomy

Physiology

Biochemistry and Nutrition

Pharmacology

Microbiology

Parasitology

Medicine and Therapeutics

Gynecology

Ophthalmology, Otology, Rhinology[,] and Laryngology

Pediatrics

Obstetrics

Surgery

Preventive Medicine and Public Health

Legal Medicine, including Medical Jurisprudence and Ethics.

The Medical Act of 1959, Republic Act No. 2382, art. II, § 6 (1959).

44. Take, for example, times of calamity. In such an instance, the Philippine National Police and National Bureau of Investigation divide the responsibility over the custody of carcasses. See Kirsten Bernabe, *Forensics is not just for crime solving*, PHIL. DAILY INQ., Sep. 2, 2014, available at <http://newsinfo.inquirer.net/634475/forensics-is-not-just-for-crime-solving> (last accessed May 12, 2017).
45. Forensic science education is barely available in the Philippines. See Rouchelle R. Dinglasan, *CSI: Philippines — Why not?*, available at <http://www.gmanetwork.com/news/scitech/science/307572/csi-philippines-why-not/story> (last accessed May 12, 2017).

Pathologists and the NBI). Relevant training in other countries are limited by their statutes to accept only citizens of their respective land, as medico-legal cases are bound to be sensitive and may touch national security issues.⁴⁶ Thus, those trained in the U.S. are actually observers or seminar attendees. Nevertheless, the U.S. has sponsored the most trainings for medico-legal officers.

The Philippines has adopted a unique setup in providing forensic services to its people. Presidential Decree No. 856⁴⁷ allows medico-legal officers of the PNP and the NBI, health officers of the government, and medical practitioners in accredited hospitals to conduct medico-legal autopsies.⁴⁸ The last, however, is hamstrung because there is no agency that accredits hospitals for this purpose. Nevertheless, some pathologists and doctor-lawyers have conducted autopsies that have been qualified as adequate in Philippine courts.⁴⁹ There was even an autopsy conducted by a nurse in Dinagat Islands, Mindanao in relation to a homicide case.⁵⁰ There can be many loopholes in this system, and the perennial excuse has been the lack of funds to entice medico-legal practitioners all over the country's divided islands.

46. Based from the Author's experience, he was not allowed to take photographs of cases he has seen in U.K. It can be also inferred from regulations by the National Association of Medical Examiners (NAME), which allows only those with training from the U.S. to take their competency exams. This training can only be availed by American citizens or immigrants.

47. Code on Sanitation of the Philippines, Presidential Decree No. 856 (1975).

48. *Id.* § 95 (a).

49. A doctor who had limited pathological training was still deemed by the Supreme Court to be an expert in traumatic autopsies because he conducted over a thousand of such. *See Borromeo v. Family Care Hospital, Inc.*, 781 SCRA 527, 542 (2016). In another case, however, the Labor Arbiter, the National Labor Relations Commission, and the Court of Appeals upheld a medico-legal officer's findings, only to be reversed by the Supreme Court on technical grounds surrounding another piece of evidence. *See Maritime Factors, Inc., v. Hindang*, 659 SCRA 526, 533 (2011).

50. This is an unpublished case. A body was found dead in Cagdianao, Dinagat Islands, in 2012. The lone female municipal health officer was not available. The nurse of a mining company was asked to do an autopsy, under her guidance through telephone. During the court hearings in Surigao City, the MHO denied performing the autopsy and denied giving instruction to the nurse. The nurse asked the Author's help on how to present his findings in court.

Funds are also not enough to empower city practitioners with the right implements and facility. Prosectors employ tools that are modified to suit their purposes. The idea is also used in developed countries, like the use of garden shears to readily cut ribs — costotomes are small and require more dexterity. In the Philippines, large knives and a rubber hammer are used to cut the ribs, which break evenly in the process. This technique in rib cutting is actually safer and preferred. The rib ends are actually jagged when crushed by costotomes or shears. The rough ends can cause unwanted cuts on prosectors working on the chest.

The minimalism in a resource-limited practice also challenges the dictum to do histopathology in all autopsy cases. With experience, histopathology of decomposing organs and tissues is actually a waste of resources and time. Seeing all those postmortem artefacts hamper an intelligent interpretation of any premortem pathology. Histopathology is also limited when a gross injury is the unequivocal cause of death.

In contemporary practice, minimalism favors the single midline incision over the Y-incision. Skipping the incision around the neck to create an adequate anterior and superior flap creates a small field of dissection. A midline neck incision thus allows only a blind dissection of the neck, which expectedly destroys soft tissues. The important contusions in the neck muscles will not be discovered. Strangulations with hands, which notoriously do not show superficial injuries, are caught with their deep tissue injuries that are necessary to compress the airways.⁵¹ The hyoid bone does not always fracture but the softer tissues will always show bruises. A midline incision up to the chin does not also make a repair from a face dissection cosmetically acceptable.

The lack of funds also pushes the Philippines at the back of emerging forensic practice among countries part of Association of Southeast Asian Nation (ASEAN). While the PNP supports forensic radiology, there is veritable lack of equipment, office, and personnel. While the Philippines has a large population of Moslems,⁵² non-invasive autopsy methods, like digital autopsy or virtopsy, are not yet available.

The PNP autopsy reports are criticized for brevity, which is a positive trait in the ABCs of technical writing. What reports must endeavor for is

51. See Rutty & Burton, *supra* note 11, at 118.

52. Philippine Statistics Authority, Philippines in Figures (2015), at 28, available at https://www.psa.gov.ph/sites/default/files/2015%20PIF%20Final_%20as%20of%20022916.pdf (last accessed May 12, 2017).

accuracy, which hinges so much on the credibility and resources of the practitioner. The autopsy reports are complete when they follow the protocol of the issuing agency, but they are only comprehensive when they cover all aspects of a case without a doubt. The last depends upon the availability of resources to the practitioner. Helpful resources to treat autopsies like scientific cases include a continuing subscription to an electronic scientific library.

To this date, the Philippine government's forensic services are limited by resources, technology, and technique. These limitations are not confined to issues in forensic medicine and forensic pathology. However, jurisprudence in this realm is robust, and it compensates for the weaknesses in the delivery of justice. Statutes are silent on which kind of autopsy to perform.⁵³ This absence of favor is good for the practitioners. Having a specific law on how to perform an autopsy will limit practitioners with their choice of techniques and may offend cultural sensitivities. The limit on cultural sensitivity may withhold delivery of justice for certain minorities.

For example, Filipino Moslems decline autopsy because existing methods do not comply with their principles,⁵⁴ even though some form of autopsy is allowed in all other Moslem countries. One Asian and Moslem forensic pathologist, Dr. Louay MuhiElddin Al-Alousi, used to work in LRI Forensic Pathology Unit and demonstrated to the Author in several occasions how autopsies are performed in their religious culture. Payne-James adds in his book that Moslems further require that only relatives, Imams, and Ustaj/Ustajas/Mustafs/Mustafas may touch their dead.⁵⁵ As a sign of respect to the dead, only procedures allowed to the living can be done to the dead.⁵⁶ As an aside, a humorous equivalent saying among Filipino Moslems is "*ang gagawin mo sa patay ay gagawin ko rin sa iyo*," which

53. This is especially true with regard to victims of crimes and deaths under dubious circumstances. See An Act Requiring Mandatory Autopsy on Bodies of Crime Victims, Deaths Under Mysterious and Suspicious Circumstances, and for Other Purposes [Mandatory Autopsy Law], H.B. No. 4171, explan. n., 17th Cong., 1st Reg. Sess. (2016).

54. See Burton, et al., Religions and the Autopsy, available at <http://emedicine.medscape.com/article/1705993-overview> (last accessed May 12, 2017).

55. M.A. Elfawal, *Shari'ah Law and the judicial system*, in FORENSIC MEDICINE: CLINICAL AND PATHOLOGICAL ASPECTS 35-36 (Jason Payne-James, et al. eds., 2003).

56. See Elizabeth C. Burton, Religions and the Autopsy, available at <http://emedicine.medscape.com/article/1705993-overview#a2> (last accessed May 12, 2017).

roughly translates to, “I will do to you whatever you do to the dead,” and is taken seriously as a warning to Christian prosecutors of the government. This attitude with regard to autopsies, coupled with some religious restrictions on the timing of autopsies, leads to the absence of evidence (autopsy report and expert testimony) on some medico-legal deaths among Moslems. This deprives their group the successful pursuit of justice in Philippine courts. With English Forensic Pathology, a view and grant examination may be sufficient in some violent deaths. A Y-incision around the thorax, which is never done among the living, is also objectionable to many Moslem communities. Limiting autopsy procedures by law will lead to a path similar to the U.S., where Moslems regularly object and refuse to the invasive autopsy,⁵⁷ which leads to a denial of justice at the cultural level, and is partly contributory to the religious divide in similar nations.

The Chinese also have misgivings on autopsy when their corpse has been prepared and fully clothed. Families will not allow the removal of the red funeral clothing.⁵⁸ View and grant may suffice for simple cases, and could even be expanded only when this procedure is not amenable to document deaths, especially those due to violence.

In the current issue of extrajudicial killings, forensic investigation can be optimized by centering death investigation under the management of the medico-legal officer or Medical Examiner.⁵⁹ The Philippine protocols for death investigation presently suffer from the bias of the Criminal Investigation and Detection Group (CIDG) homicide investigator.⁶⁰ *Esprit de corps* makes it difficult to pursue and prosecute a colleague.

57. See Jake Grovum, Religious Freedom, States’ Interests Clash Over Autopsies, available at <http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/6/29/religious-freedom-states-interests-clash-over-autopsies> (last accessed May 12, 2017).

58. Architect Edward Co Tan explained how difficult it is to do a belated autopsy to a Chinese cadaver that has been fully prepared for burial. Only in very extreme cases may the red burial cloth be removed, — forensic autopsies that need examination of body parts that are covered by the cloth.

59. See SPITZ & FISHER, *supra* note 2.

60. Such as the recent case of the slaying of Albuera, Leyte Mayor Rolando Espinosa, which involved members of the Criminal Investigation and Detection Group. See Francisco Tuyay & John Paolo Bencito, *Espinosa: 21 cops probed*, MANILA STAND. TODAY, Nov. 8, 2016, available at <http://thestandard.com.ph/news/headlines/220873/espinosa-21-cops-probed.html> (last accessed May 12, 2017).

Even though the coroner system is mostly disparaged in textbooks, the view and grant method affords an economical alternative in high volume decedent offices. The English coroner system recommends that a pathologist must be the minimum requirement to view and grant, and that this pathologist be equipped with premortem data (hospital and clinic health records), and death scene investigation (police reports).⁶¹ The pathologist can decide whether an invasive autopsy will still be needed.⁶²

Specimen for serology, toxicology, and blood DNA are ideally taken from the iliac veins after most of the organs have been removed for closer inspection and postmortem biopsy. However, the lack of medico-legal personnel who are appropriately trained in toxicology, surrenders toxicologic evaluation to chemists, who nearly always cannot examine blood to this date, with the usual reason of lack of capability — most likely machine malfunction or lack of reagents.

This Author finds the anogenital exanteration in English Forensic Pathology unnecessary in most cases of suspected sexual abuse. Lacking a study at the present time, most external examination findings with ancillary tests are adequate to clarify sexual abuse issues in cadavers, except for one case of doubt in a poorly-resolved case from a Regional Trial Court III (Central Luzon) in the past decade where the duty-prosector has been doubted.⁶³ Nevertheless, an astute examiner can find genital and extragenital findings as supportive evidence of sexual abuse issues. Anogenital exanteration, which is the removal of the pelvic block including the coelom and of the vagina and rectum, may still find future application if insertion of any object through the vagina or anus becomes criminal when done to dead persons.

Table 2 shows formal and critical differences between English Forensic Pathology and the existing Medico-Legal System in the PNP. Besides technique, the most instructive is the use of neck and face dissection to elucidate traumas or injuries thereat.

61. Caroline Brown & Christopher P. Dorries, *Autopsies and the law*, in THE HOSPITAL AUTOPSY: A MANUAL OF FUNDAMENTAL AUTOPSY PRACTICE 31-32 (Julian L. Burton & Guy N. Ratty eds., 2010).

62. *Id.*

63. A PNP Medico-legal officer exclaimed having evidence of rape or sexual abuse in a homicide case in court, however, failed to provide it. This led to his suspension and demotion in rank.

Table 2. Short Comparison of Autopsy in English Forensic Pathology and the PNP Medico-Legal System

ENGLISH FORENSIC PATHOLOGY	PNP MEDICO-LEGAL SYSTEM
Uses invasive and non-invasive autopsy methods	Uses invasive methods and uses external examination but only sparingly
May use posterior approach to access posterior body cavity	Allows posterior approach
Full forensic autopsy includes neck and face dissections	Allows face and neck dissection, if indicated
Discerns soft tissue muscle contusions and injuries of the neck through careful and sensitive dissection	Dependent on narratives, external findings, hyoid bone fracture, and airway findings in elucidating injuries of the neck
Uses Y-incision around the neck to access the anterior body cavities	Uses Y-incision around the thorax, or a single midline incision for the anterior body cavity
Usually removes and returns five organs for histopathologic studies	May remove or return seven to 13 organs for histopathologic studies
Will most likely perform histopathology in all full forensic autopsies	Judiciously uses histopathology when it can significantly contribute to the clarification of cases, or when there is doubt in gross pathology findings
Cardiopathology diagnosis is made by a pathologist based on cardiomyopathy, pericardiopathy, valvulopathy, and coronary and vascular pathology	Ischemic heart disease is diagnosed by generalists, basing on gross changes on the cardiac surface
Prefers blood for toxicologic studies	Still uses gastric contents and tissues (liver, lungs, kidneys, or muscles) for toxicologic studies
Allows anogenital exanteration when indicated	Uses its sexual abuse protocol for examination

ENGLISH FORENSIC PATHOLOGY	PNP MEDICO-LEGAL SYSTEM
Finds and explains all material and pieces of evidence found on the body	Favors material and relevant pieces of evidence found on the body
Uses small and broad-bladed surgical knives, rib cutters or shears, aspirators and syringes, electrical oscillating saw, 13 towels, neck block, and personal protective equipment (PPE) for autopsy	Uses a knife and a saw in opening the body
Fastest performance is 90 minutes	Fastest performance is about 15 minutes

English Forensic Pathology offers more for its inherent cultural sensitivity and allowance of gradual escalation of procedures, depending on what is culturally and legally permissible and what is prudently necessary. This Article has discussed so little about techniques. Professor Rutty's parting words at the end of training were, "Now that you know, can you do all these with a knife and a saw?" The three American experts who came to the Philippines saw for themselves that the skills and knowledge in English Forensic Pathology are transferable, and that a lot can be done with just "a knife and a saw."