

Capt. J. T. Ruth Slain From Ambush

Three Killed, 2 Wounded By Farm Hand's Bullets

Harry D. Sordoni, State Senator's Brother, First Victim of Slayer

FUGITIVE KILLER ENDS HIS OWN LIFE

Surrounded After He Mortally Wounds Harvey's Lake Police Chief

Death stalked on the Harry D. Sordoni farm in Lehman and Jackson townships Saturday night and yesterday leaving two murders and a suicide.

Capt. John T. Ruth, 49, of Harvey's Lake, chief of Luzerne county deputy sheriff and chief of Harvey's Lake police department, and Harry D. Sordoni, 52, of 884 Rutter Avenue, Kingston, prominent gardener and farmer, and brother of Andrew J. Sordoni, State Senator, were victims of a peaceful farm hand suddenly transformed into a murderous maniac.

Paul Skopa, 28, who fired eight shots at eight persons, used his last shot to blow his head off when he saw that capture or death was inevitable.

Francis Sordoni, 25, son of Harry D. Sordoni, is in Nesbitt Memorial hospital with buckshot wounds in right hip and legs. Condition favorable.

Frieda Sordoni, 16, heroine, daughter of Harry D. Sordoni, who braved two shots fired by the maniac, and who, after

assistance had been refused, dared to return to the farm house for her father, mother, and brother, is at her home suffering from cuts and shock.

Motive for the double slaying and attempted murders were undetermined last night by John T. Dempsey, county detective, and State police. Numerous reports were being investigated. The police were convinced on only one point, that the slayer and suicide had suffered a sudden mental derangement. An attempt was being made to learn something of the alleged maniac who had been employed on the Sordoni farm for the last year and who had been held in high regard by Sordoni family members and their farm neighbors.

Triple Tragedy

The farm tragedy was in three parts. Harry Sordoni, his son and his daughter were shot or shot at near the farm house on Saturday night at 8. Paul Skopa then made his escape in the timber and thick underbrush between the farm house and a

road leading to Chase, about one mile distant. Harry Sordoni died in Nesbitt Memorial hospital yesterday morning at 4:30 of gun shot wounds in the back, hips and legs.

The second part of the tragedy was enacted yesterday morning at 5:35 when Capt. John T. Ruth was fatally shot from ambush as he and Patrolman John Higgins of Harvey's Lake renewed their search for Skopa in the wooded section opposite the Sordoni farmhouse. Capt. Ruth succumbed to his wounds in Nesbitt Memorial hospital yesterday morning at 8.

The finale came shortly before 9 yesterday morning when Skopa, surrounded by county detectives, twenty State troopers and a posse of twenty-five armed farmers was suddenly surprised by three members of the posse. Fighting until the last he fired one shot at the men and then putting the barrel of his gun in his mouth, pulled the trigger and his last shell sent him into eternity.

Capt. Ruth died a martyr. On Saturday night at 8 he was on duty at Harvey's Lake when he was informed that Skopa had shot Mr. Sordoni and his son Francis and had fired at Frieda Sordoni and he arrived at the Sordoni farm before State police and county detectives.

With the other authorities he scoured the woods until 2:30 yesterday morning when it was decided it would be useless to continue until daybreak. Skopa, authorities learned, had spoken of friends and relatives in Larksville, Edwardsville, Plains and other places and it was agreed that State troopers would investigate in those places and that Capt. Ruth would

look around Harvey's Lake and that all would meet later in the day to take up the search if Skopa had not been found.

Authorities believe that Capt. Ruth had an idea that Skopa might attempt to reenter the Sordoni home which was untenanted after Saturday night's shooting and that by going to the house yesterday morning at 5:30 he could hide and detect Skopa if he came in the clearing.

Instead of coming into the clearing Skopa was in ambush about 100 feet from the farm house and when Capt. Ruth with Patrolman Higgins started up a small path Skopa fired two shots. The first went wild and imbedded itself in front of the farm house but the second, a one ounce ball, mixed with buckshot, hit Capt. Ruth on the right chest and he fell mortally wounded. Patrolman Higgins reported that the source of the shots could not be determined and that he picked Capt. Ruth up and carried him to the waiting automobile for the hospital trip.

After wounding Capt. Ruth, Skopa stealthily moved through the woods and underbrush to a location about a mile from the farm house where he took his own life about three hours later when cornered by police and the posse.

It developed that what police believe was an idea of Capt. Ruth's was well founded as after Skopa killed himself they found a gallon jug half filled with water, some food and a hunter's coat, indicating that Skopa had been in the farm house after the police departed and had taken supplies for a siege in the woods.

Last night police say they learned that Skopa had been intoxicated on Saturday night and asked Mr. Sordoni for some money but that Sordoni said he would not give him money until he was sober. Members of the family denied this theory saying that Skopa was not drunk and they did not hear him discuss money matters with Sordoni.

Leaves for Sordoni Home

After the police had left the vicinity of the Sordoni farm to return later and take up their search of the woods for Skopa, Capt. Ruth reached his Harvey's Lake home about 2:45. He had only been home a short time, his widow said yesterday, when a Harvey's Lake man entered a complaint and Capt. Ruth went out to investigate. He later returned to his home, where he met Patrolman Higgins and they discussed the Sordoni shooting.

Shortly after 5 o'clock yesterday morning Capt. Ruth and Higgins started for the Sordoni farm hoping to see Skopa in the clearing. Stopping their automobile on the dirt road which fronts the Sordoni farm house just inside the Lehman Township line, Capt. Ruth and Patrolman Higgins alighted.

There is a path and slight clearing in the woods on the side of the road opposite the front of the farm house and as this was the way Skopa was said to have taken after shooting Sordoni and his two children on Saturday night the two officers started up the path and after walking about twenty feet entered Jackson Township.

Two Shots Discharged

About 100 feet from the road a shot was fired from ambush but went wild. In a moment another shot was fired and Capt. Ruth fell in his tracks, blood streaming from a gaping wound in the right side of his chest. Patrolman Higgins picked Capt. Ruth up, carried him to the waiting automobile and drove about a mile to the Garringer home, where he summoned State police and county detectives who were at Wyoming Barracks preparing to return to the Sordoni farm to renew the search.

Capt. Ruth was rushed to Nesbitt Memorial hospital where he died at 8 yesterday morning.

First Shot Goes Wild

The first shot at Capt. Ruth and Patrolman Higgins was a "pumpkin" shot and went wild. The one-ounce ball traveled about 200 feet across the road and made a two-inch indentation in the second board above the base board on the lower right front of the Sordoni farm house.

Mr. and Mrs. Floyd Smith, who live in a house near the Sordoni farm and who had not slept much following the tragedy on Saturday night, were aroused by the two shots yesterday morning at 5:35.

After the second shot, Mrs. Smith said, she could hear a deep strong voice shouting "Jack, Jack, I'm shot." The woman declared that this call repeated a number of times. She said it was heart rending and though she did not know what had

happened she believed it occurred on the Sordoni farm. She and her husband hurriedly dressed and arrived in time to see Patrolman Higgins driving away with Capt. Ruth. Capt. Ruth was treated at the home of Dr. H. A. Brown at Lehman before being taken to the hospital.

Skopa Considered Harmless

Mrs. Smith said that Skopa appeared like a harmless man and had been well liked by children living in the vicinity, especially by her son, Basil, aged 6. During the spring Mrs. Smith said, Skopa had been ill for several months and her son spent almost every day at the man's bedside at the Sordoni farm house. She said that Skopa took care of the live stock and buildings at the farm and always kept himself busy about the premises. She knew of no prior trouble between Skopa and the Sordoni family and was at a loss for a motive for the man's action.

Skopa Young, But Hair Was Gray

However, she said, Skopa was a young man but his hair had turned gray rapidly in the last several months and expressed the opinion that he may have worried over something.

A half-hour after word had been received that Capt. Ruth had been wounded by a shot from Skopa's gun, twenty State troopers and the county detectives and other authorities who had worked on the Sordoni shooting on Saturday night were back at the Sordoni farm.

They were joined by twenty-five nearby farmers, all armed with shot guns, revolvers or rifles. As Skopa did not emerge on

to the road in front of Sordoni home after Capt. Ruth fell mortally wounded, they were convinced that he was in the timber and underbrush between the road fronting the Sordoni farmhouse and the dirt road leading to Chase, about one mile west.

Posse Surrounds Farm Hand

It was decided to split up in twos, threes and fours and surround the area in an effort to corner Skopa. Making a wide circle and starting about 6:30 yesterday morning, the police and the armed posse started to close in on the wooded area directly in front of the Sordoni farmhouse.

Shortly before 9, three Garringer brothers, John, Harold and George, who live along the dirt road about a mile west of the Sordoni farmhouse, came upon Skopa sitting on an old tree stump about three-quarters of a mile away from the Sordoni house and a short distance from the Chase road. Harold, who lives in New York State, is home on a vacation.

Fires On Brothers

One of the brothers, on accosting the man said "What's the matter, Paul?" Paul, they reported, replied by aiming his shot gun and firing a shot at the three brothers. They scrambled to earth and behind trees and drawing their guns answered the fire. Before they were able to hit the farmhand, Skopa, retaining his sitting posture on the log, placed his barrel in his mouth and pulled the trigger to blow the top of his head into the low hanging trees.

Skopa fell forward into the underbrush on top of his gun. State troopers and posse members, hearing the shots exchanged by Skopa and the Garringer brothers, hastened to the scene. County Detective Dempsey reported that the man lay in such a position that it appeared he was waiting in ambush for another victim. His head injuries were not visible from a distance and authorities fired a number of shots at the prone man before they realized he had killed himself.

Near the man the authorities found a gallon jug half filled with water, a quantity of food, the shot gun, two empty shells and a hunting coat. In a shed near the Sordoni farmhouse, but on opposite side of the road, authorities found a suitcase containing Skopa's clothes.

Returns After First Shooting

Neighbors reported that after Skopa had fired at Sordoni and his son and daughter on Saturday night, the farmhand fled into the woods with nothing but the shot gun. Some time after the police left the farm yesterday morning at 2:30, it is believed that Skopa returned to the house, which was untenanted because of the Saturday night shooting, and obtained the water, food, and hunting coat to prepare for a long siege in the thick timberland. It is also believed he obtained more ammunition as neighbors think his ammunition was exhausted when he entered the woods on Saturday night.

When he was surprised by the Garringer brothers during the roundup yesterday morning, police believe the Skopa had but

two shells. One of these was fired at the brothers in reply to their question and he used his last shell to take his own life.

Lynching of Skopa Threatened

The shooting at the Sordoni farm on Saturday night shocked the countryside, but the tragedy yesterday morning aroused the ire of residents who declared that Skopa would most likely have been lynched if he had been captured before he fired the shot which ended his life.

Skopa had worked and lived at the Lehman township farm for the last year. About 10 on Saturday morning he came to the Sordoni home at 884 Rutter Avenue, Kingston. Mrs. Sordoni and Frieda said he was courteous as he had always been and did not seem irrational.

Early in the evening members of the Sordoni family prepared to go to the Lehman township farm for the weekend and Skopa rode back with Mr. and Mrs. Sordoni, Frieda and Francis, daughter and son.

Shoots Mr. Sordoni First

Just before dusk the family was unloading supplies from the automobile when they said Skopa came toward them with an old double barreled shot gun owned by Mr. Sordoni. They said he fired point blank at Mr. Sordoni twice. Mr. Sordoni was hit in the back, hips and legs. One of the shots is believed to have

been a “pumpkin” as a one ounce ball entered Mr. Sordoni’s back.

When Francis saw Skopa firing at his father, the boy ran to his father’s assistance and was hit by a load of buckshot which imbedded itself in his right hip and legs.

Girl Makes Getaway

Remaining remarkably cool, and paying no attention to Skopa, Frieda Sordoni ran to the automobile to summon aid. As she turned on the ignition switch and was stepping on the self starter, Skopa fired a “pumpkin” shot at the girl. The one ounce ball went through a bar on the side of the car near her stooped head and grazed her right shoulder.

Still maintaining her courage, the girl started the automobile and was making a getaway when Skopa fired a second shot which shattered the side windshield and the flying glass cut her arms and wrists. Despite the injuries, Frieda drove two miles into Lehman, where she told Dr. Brown what happened and asked him to summon the police.

In the meantime Mrs. Sordoni ran into the house and in her haste stumbled and fell. Skopa, with the shot gun, is said to have followed her. In the house it is said that Mrs. Sordoni feigned injury and remarked that Skopa had also shot her. Neighbors said that Skopa then went to the front of the house and that later Mrs. Sordoni came out and that Skopa started a conversation with her. They declared that Mrs. Sordoni attempted to pacify Skopa and keep him conversing until aid

arrived, but that he suddenly left her and made his way through the woods across the road opposite the farm house.

Daughter Returns to Home Alone

Frieda Sordoni, after being treated by Dr. Brown, said that she was unable to persuade any person to return to the farm with her when she had informed them of what had taken place. She returned alone for her parents and brother and reported that when she arrived Skopa was still in front of the farm house, but that he made no further effort to shoot her.

Hurriedly she helped her mother, who had fainted several times, into the seat. She lifted her father to the running board and held his arm to prevent his falling off. She drove almost a mile before she stopped and lifted her father, a heavy man, into the car. Then she drove to Nesbitt hospital with her father. On Main Street, Luzerne, she spied. Floyd Smith, who lives near the Sordoni farm and asked him to hurry to his home as there had been a shooting. Smith said yesterday that he returned home but did not know what had happened as the Sordoni girl continued on her way to the hospital.

Francis Sordoni was taken to Nesbitt hospital by a motorist who was summoned by a neighbor.

Frieda Sordoni said that Skopa fired five shots on Saturday night; that four of these were “pumpkin” shots and the fifth, which hit her brother, a scatter shot.

Police said last night they learned that Skopa had been drinking and after he arrived at the farm with the Sordoni family he asked Mr. Sordoni for some money. They reported

that Mr. Sordoni replied that he would give Skopa money when he was sober, but would not give him any on Saturday night. Yesterday members of the Sordoni family said that Skopa was not drunk on Saturday night and the same expressions were voiced by neighbors. Members of the Sordoni farm said that their father did not owe Skopa anything and that they did not hear money matters discussed.

Discussed Murder

On the trip to Lehman on Saturday night they said that Skopa talked about a murder where a woman had been killed by her husband but that they did not discuss the matter with him and did not discuss the matter with him and did not know what murder he referred to.

The shooting of Mr. Sordoni, his son and his daughter occurred to the left of the farm house in Lehman township. Blood marks yesterday indicated the spots where the father and son had fallen.

Ruth An Officer 30 Years

Capt. John T. Ruth, aged 49, was a native of Philadelphia. For more than thirty years he had been engaged in police work. For a number of years he conducted a private detective agency in Philadelphia and was employed by Bryant Detective Agency. Fourteen years ago, when Mr. Bryant disposed of his agency, Mr. Ruth came to this city and became captain of Hazard Manufacturing Co. police, a position he held for five and one-half years.

Six years ago Capt. Ruth became chief of police of Lake and Lehman townships. Prior to this time, after he relinquished his job with the Hazard Manufacturing Co., he had conducted a private detective agency. Three years ago when John ManLuskie was elected sheriff, Capt. Ruth became Sheriff MacLuskie's chief deputy. In the last several months, particularly during the illegal strike of Pittston Coal Co. employees, Mr. Ruth had worked night and day and, according to his widow, obtained little sleep.

Capt. Ruth leaves his widow and two children, Luella May and Leonore Bernice. He also leaves his father, John T. Ruth of Philadelphia, and sisters, Pearl, Florence and Edna of Philadelphia. His father and sisters arrived in this city last night. The funeral will be held from Kniffen's undertaking parlors.

Frequently commended for his fearlessness, Capt. Ruth had gone through numerous police adventures without serious injury, with one exception. Early Sunday morning, August 6, 1928, he suffered two fractures to the skull when struck by a mile bottle while attempting to disperse a crowd of noisy bathers at Harvey's Lake. He had received the reports of the rowdyism and had gone to break up the crowd when the bottle was thrown. He was in a hospital for several weeks.

Mr. Sordoni is survives by his widow; two daughters, Frieda and Florence, and his son, Francis; also by the following brothers and sisters, Joseph, at home; Lewis of Florida; Andrew J. and Nicholas of Kingston; Mrs. Roy P. Walter of Forty-Fort, and Grace W. Gilbert of Massachusetts.

Funeral services for Mr. Sordoni will be held from the funeral parlors of Paul Nulton at Beaumont, Tuesday afternoon at 2

o'clock. The funeral will be in Fern Knoll Cemetery at Dallas. Friends are requested to omit flowers.

Victim's Family Unable to Offer Slaying Motive

Lack Knowledge of Action by Skopa Throwing Light on Shootings

HEROINE GIVES STORY

Describes Trip to Summon Aid and Removal of Her Father to Hospital

Unable to erase from their minds the tragic scene of Saturday, Mrs. Harry D. Sordoni and daughter, Frieda, yesterday sought vainly to explain the motive of their hired man, Paul Skopa, in killing Mrs. Sordoni's husband and wounding her son Francis.

Though they racked their memories for some incident which might help to explain the shooting, neither Mrs. Sordoni nor Frieda could give a logical explanation for the twist of fate which changed Skopa from a willing farmhand to a cruel killer in a few minutes.

"We never suspected Paul would do anything like he did," Mrs. Sordoni said. "Only yesterday he came in to visit us and sat on the porch swing with me. He talked of some man who had murdered his wife. Of course, we thought nothing of that. I can't understand what happened to him."

Frieda, sixteen-year-old heroine of the shooting, was with her mother at the home of a neighbor all day yesterday. Modestly disclaiming any credit for bravery, the girl spent most of her time trying to make her mother comfortable. She sat by the sofa on which her mother was reading and told her actions which probably averted further tragedy.

"As soon as I saw Paul shoot my father I knew I should get help. I started for the automobile and Francis ran toward Daddy. Paul shot again and I saw Francis fall over. So I jumped in the car and when I was reaching over to start it Paul shot at me."

"The shot went through the bar near my head and grazed my shoulder. As I was starting the car Paul shot again and smashed the glass in the side shield. When the glass broke a piece of it flew and cut my wrist."

"I drove down the road toward Lehman and tried to get someone to go back to the farm with me but no one would go. So I turned around and went back alone. I helped my mother into the seat when I got back to the farm and lifted my father onto the running board so I could hold him on when we started."

"Daddy's leg bumped against the side and he asked me to put something under it. He wanted a drink, too. I had to drive on because there was a car behind us and I thought maybe it was Paul. When I did stop I lifted my father into the car. I guess I passed a lot of red traffic lights going down to the hospital."

Florence, another daughter, was not at the farm. She, too, said she had never suspected Paul. She had seen him seated on the porch yesterday and had greeted him. She said she called Capt. Ruth at Harvey's Lake as soon as she heard of the

shooting and had warned him that Skopa had a gun and ammunition and that something had happened to make him dangerous.

Fund Started To Honor Memory Of Capt. Ruth

The whole Wyoming Valley and surrounding countryside will pay in thoughts and words tributes of praise to the brave sacrifice which Capt. Ruth made yesterday morning when he was shot down while in pursuit of a slayer. He performed his duty as an officer of the law at the cost of life itself.

He was paid but meagerly for the risk which he took. As chief of the Harvey's Lake police force he received but \$50 a month, as much as the association felt it could afford to pay him.

The price which he paid for devotion to his duty deserves more than words of praise. It deserves some form of recognition which will help his loved ones, his widow and children, feel that there are many who really care.

It is with the idea in mind of translating into a form of substantial comfort the feeling of deep regret which raced into the hearts of thousands yesterday when they heard that Capt. Ruth had been mortally wounded, that the Record this morning suggests a public fund as a gift to his widow and children, a testimonial to the courage of the husband and father.

The Record will be glad to receive and acknowledge contributions and invites the cooperation of other newspapers

in the city to that end. The Record suggests that you send your contribution to this newspaper, or to any other newspaper or to any bank in Wilkes-Barre, addressed Trustee, John T. Ruth Testimonial Fund and with a request that it be forwarded to the trustee.

The fund is opened with three contributions:

Anonymous.....	\$ 10.00
Andrew J. Sordoni.....	\$100.00
Francis J. Devlin.....	\$100.00
Total.....	\$210.00

The fund was first suggested when the anonymous contribution was received. The matter was merely mentioned by telephone to Senator Sordoni last night when he and Mr. Devlin both volunteered their contributions.

A trustee for the fund will be appointed today. The income will be paid to Mrs. Ruth and her two daughters, one aged 7, the other aged 16.

Contributions in any amount will be acceptable.

Motive For Double Slaying Not Learned

Police Believe Farm Hand Became Mentally Deranged

Opinion that the underlying cause for the slaying of Capt. John T. Ruth and Harry D. Sordoni and the attempted killing of several other persons by Paul Skopa, suicide, on Saturday night and Sunday morning will never be known was expressed last night by State police and county authorities.

This announcement was made after almost two days of continuous investigation. Hundreds of reports were investigated but authorities said that nothing tangible was uncovered. All the territory covered on Sunday by the authorities was retraced yesterday.

The only point on which authorities are convinced is that Skopa suffered a mental derangement and was suddenly transformed into a murderous maniac when he obtained the shot gun at the Sordoni farm on Saturday night and attempted to annihilate the Sordoni family. Harry Sordoni, the father, died in Nesbitt Memorial hospital from wounds suffered when hit by two shots. Another shot fired by Skopa hit Francis Sordoni, 25, the son and two additional shots fired at Frieda Sordoni, 16, the daughter missed their mark. Francis Sordoni is in Nesbitt hospital where his condition continues to improve.

Capt. Ruth fell from a shot from the assassin's shotgun and died a martyr to duty. Capt. Ruth, authorities believe was preceding on the theory that Skopa, early on Sunday morning would make an effort to enter the Sordoni farm house before attempting a final getaway.

Police last night had been unable to learn much about Skopa. They visited various homes in Plains, Edwardsville and other municipalities but could not find any trace of his family. The body is in morgue of Coroner Kniffen and if no word about the man's relatives is received today he will possibly be buried on Wednesday.

The funeral of Harry D. Sordoni, first victim of the crazed man's shot gun, will be held from the funeral parlors of Undertaker Paul Nulton at Beaumont, this afternoon at 2, and will be strictly private. Interment in Fern Knoll cemetery at Dallas.

Funeral of Capt. Ruth will be held from Kniffen funeral parlors on South Main Street on Wednesday afternoon at 2 o'clock. The body may be viewed in Kniffen's from noon today until noon tomorrow. Fraternal services will be conducted in the rooms tonight at 8 o'clock. After the services tomorrow afternoon at 2 o'clock the body will be taken to Trucksville Methodist Church, where final services will be conducted. Interment in Evergreen Cemetery.

Capt. Ruth was a member of Landmark Lodge 442, F. & A. M. Wilkes-Barre lodge of Elks, Wilkes-Barre lodge of Moose, Plymouth lodge, P. O. S. of A.; Jr. O. U. A. M. of Plymouth; Scranton Consistory; Irem Temple; Dallas Rotary Club and Lehman Grange.

Skopa Buried Without Mourners Or Services

Without mourners and without funeral services, Paul Skopa, slayer of two and suicide, was buried yesterday afternoon in Maple Hill Cemetery, Ashley.

Relatives could not be found, the body was unclaimed and burial was at expense of Luzerne County. The funeral was held

from parlors of Coroner Luther M. Kniffen on South Main Street.

Many Attend Ruth Funeral

Deputy Sheriffs Are Active Pall Bearers For Former Fellow Officer

Paying their final impressive tribute to a brave police officer, hundreds of persons, including associate peace officers, county officials and citizens attended funeral services yesterday afternoon for Capt. John T. Ruth, Harvey's Lake police chief and Luzerne county deputy sheriff, who was murdered by a farm hand near Lehman on Sunday morning.

It was estimated that 3,000 persons filed past the bier in Kniffen's parlors, from where funeral services were held, in the twenty-four hours preceding burial. Around the beautiful bronze coffin were banked numerous floral tributes.

After brief services at Kniffen's chapel, the body was taken to Shavertown Methodist Episcopal church where final services were held, with Rev. H. F. Henry, pastor, and Rev. W. S. York of

Alderson officiating. Interment was in Evergreen cemetery where Masons had charge of ceremony.

Honorary pall bearers were: Lawrence B. Jones; John MacLuskie, State Senator A. J. Sordoni, Attorney Andrew A. Hourigan, Dr. Bernard Glanckopf, Arthur N. Tredinnick, A. S. Galland, L. E. Beisel, John Stoneburn, A. A. Bloomburg, Francis Devlin, Ben Jones, W. S. Goff, Richard Trethaway, Thomas Heffernan, S. T. Nicholson, Stewart Girvan, William Bennett and Samuel J. Connor.

Active pall bearers, employees of the sheriff's office, were: Adam Lowery, Elliot Smith, Samuel Francis, James Hurrey, Joseph S. Keller and David Hughes.