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THE ROLE OF CRYSTALS IN POLARIZING INSTRUMENTS

MICHAEL RICHARTZ, SVD.

INTRODUCTION

The word "crystal" comes from a Greek word meaning "clear ice" but the word was applied not only to ice but also to transparent minerals. Their beauty caused by the striking effects of light and color made them desirable for ornamental purposes. Their mathematically inspired appearance made them attractive to scientists. Then with the increase in knowledge of minerals and the growth of speculation on the structure of solid matter, interest shifted to the other remarkable feature of these transparent minerals—their precise geometrical shapes. And so the word crystal was applied to solids which, whether transparent or opaque, showed in their natural state the flat faces and the symmetry which appeared to be characteristics closely related to their inner structure. This is the meaning the word acquired in eighteenth and nineteenth century science. Scientists recognized two types of solid substance, the crystalline and the amorphous ("without form"), and glass was a typical amorphous solid. Nowadays the word crystal means anything having a precisely ordered internal structure, external shape is a less fundamental character than internal structure.

Crystals have remarkable properties in virtue of their internal regularity—some strange and beautiful effects on light which passes through them. Of course, there exist those effects on light which are of the same nature in crystals as in other forms of matter like glass or water—effects which may be called normal effects of light because they are shown by all substances, whether crystalline or not. The strange effects which occur in crystals but usually not in glasses or liquids are essentially crystal effects. The two most important effects are *birefringence* and *optical activity*. These peculiar properties of crystals enable the scientist to

construct optical tools which are essential components of polarizing instruments being employed in polarimetry, ellipsometry, and imterferometry.

It is with these peculiar properties and their applications in optical instruments that this paper is concerned.

PECULIAR PROPERTIES

Although the optical properties of a crystal are closely related to its crystallographic symmetry, a discussion of symmetry preperties and crystal classes is beyond the purpose of this paper. The relationship between crystallography and the two peculiar properties—as far as it is needed—will be dealt with at the proper place.

BIREFRINGENCE

By the word "birefringence" or "double refraction" is meant the difference in refractive indices. In amorphous substances the velocity of light is the same in all directions, and hence the refractive index is the same for all directions of light propagated in that substance. Such substances are said to be optically "isotropic". The same is valid for isometric (cubic) crystals. In other transparent crystals the value of the refractive index varies with the direction of the light, such solids are said to be optically "anisotropic". Before discussing the anisotropic crystals in detail let us explain the concept double refraction by means of a simple illustration.

Path of light rays through calcite. A little black spot on a piece of white paper is looked at through a crystal of calcite or Iceland spar, as it is called. We do not see one spot but two spots side by side (Fig. 1). In rotating the crystal while resting it on the paper one image keeps still while the other rotates around it. One image seems to behave normally, but the other is quite extraordinary. Another important difference between the two images is that the ordinary image looks higher than the extraordinary one. The fact that the two images seem to be at different depths means that the calcite crystal behaves as if it has two different refractive

indices, in fact, there are two rays coming through, and the refractive index for the ordinary one is greater than for the extraordinary one. These strange effects were first described in 1669 by Erasmus Bartholinus.(1)

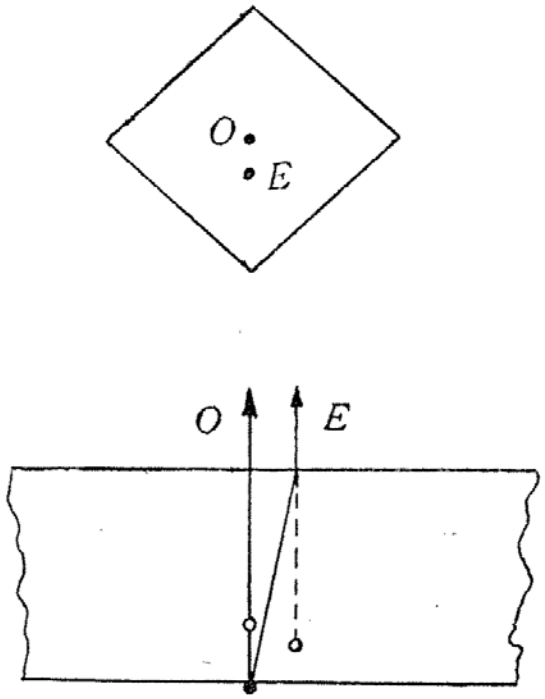


Fig. 1. Ordinary (*O*) and extraordinary (*E*) images of a black spot viewed through a crystal of calcite.

Now we know that the crystal has the power of converting ordinary light into two rays, both linearly polarized but with their planes of vibration at right angles to each other. The ordinary ray vibrates in a plane bisecting the acute angles of the rhomb of calcite, while the plane of vibration of the extraordinary ray bisects the obtuse angles (Fig. 2).

Ellipsoid of wave normals. Let us now return to the behavior of anisotropic crystals in general. The variation of the refractive index with the light direction can be best understood by considering the so-called "ellipsoid of wave normals". Let us draw in all directions from the center of a crystal lines with length pro-

(1) For an account of the historical background see E. T. Whittaker, "*History of the Theories of Aether and Electricity*," Vol. I (London: T. Nelson, 1952), E. Hoppe, "*Geschichte der Physik*" (Braunschweig: Vieweg und Sohn, 1926).

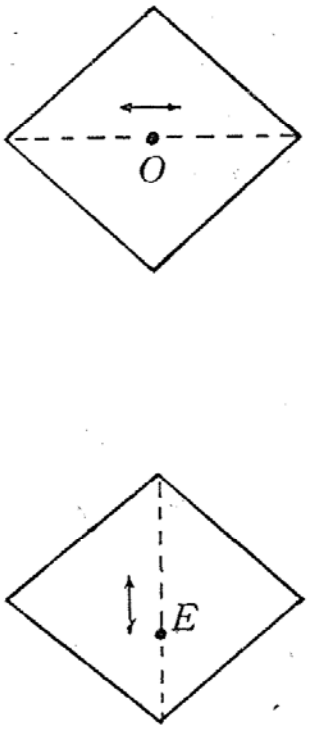


Fig. 2. Vibration directions of the *O*-ray and the *E*-ray.

portional to the reciprocal of the light velocity, i.e., proportional to the refractive index. For cubic crystals the form of the surface is a sphere (Fig. 3a). Its radius is proportional to n, the refractive index of the crystal. There is no polarization and no double refraction, in whatever direction one looks through the crystal.

Uniaxial crystals. For substances crystallizing in the tetragonal and hexagonal systems the surface is a rotation ellipsoid in which all sections perpendicular to one axis are circular (Fig. 3b). This axis, called "optic axis" coincides with the crystallographic axis c of the crystal. It is the unique direction of ordinary single refraction. Hence these crystals are described as optically "uniaxial". The radius of the one circular section represents the ordinary refractive index (ω). For all other directions the section at right angles to the light direction is an ellipse, and the longest and shortest radii of the ellipse represent the two refractive indices for that light direction. Since one of them is equal to the radius of the circular section, the ordinary refractive index is always the same whatever the light direction. Figure 4 illustrates these relations for a definite light direction or wave normal s.

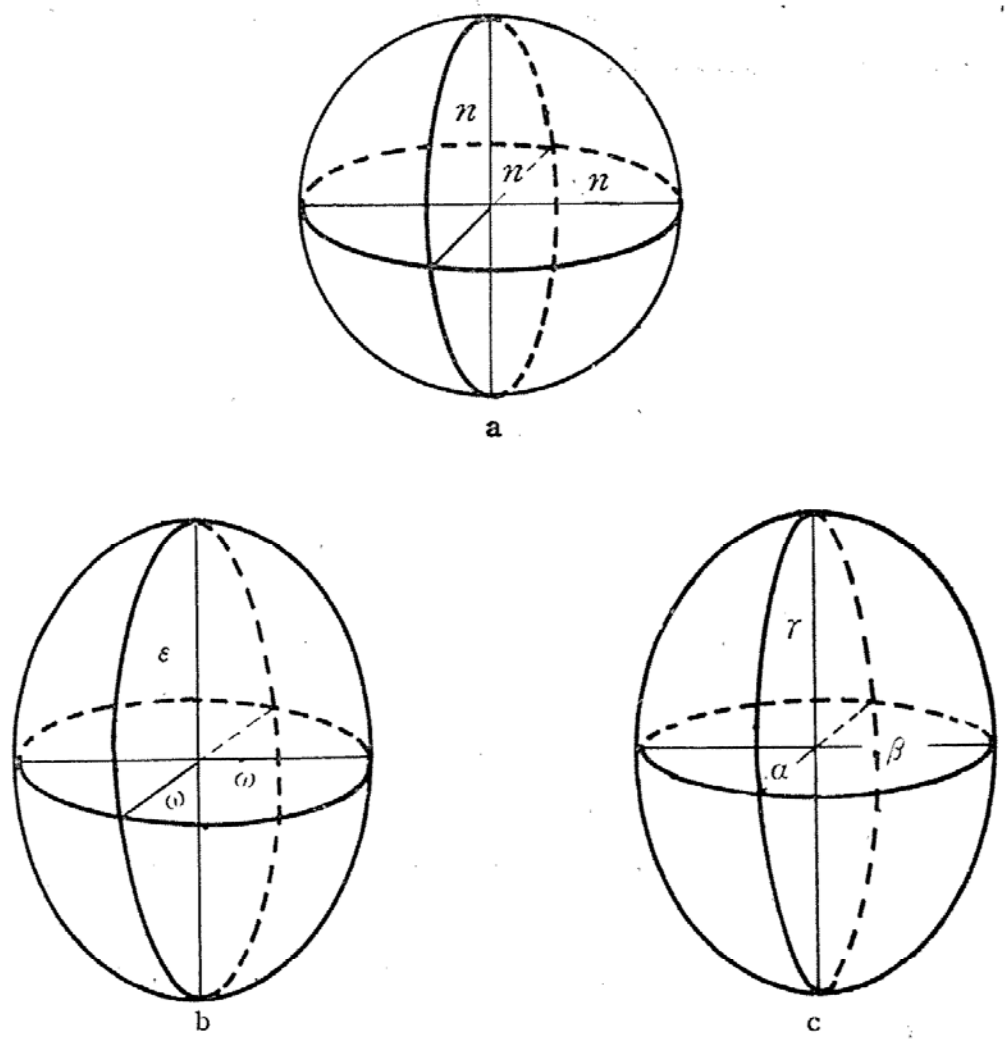


Fig. 3. Ellipsoids of wave normals, a) for cubic crystals, b) for uniaxial crystals, c) for biaxial crystals.

The plane containing the wave normal and the optic axis OZ is called the "principal plane" (shaded in the figure). The ellipsoid is symmetrical about this plane. Hence the elliptical section through O by the plane perpendicular to s is symmetrical about the principal plane, and the principal axes of the ellipse (longest and shortest radii) are parallel and perpendicular to the principal plane. Thus the light vector of the ordinary wave (D') vibrates at right angles to the principal plane while the vector of the extraordinary wave (D'') is in the plane. One of the two waves that corresponds to any particular wavenormal direction s is an ordinary wave, with a velocity independent of the direction of propagation. The other wave is an extraordinary wave with a

velocity depending on the angle between the direction of the wave normal and the optic axis.

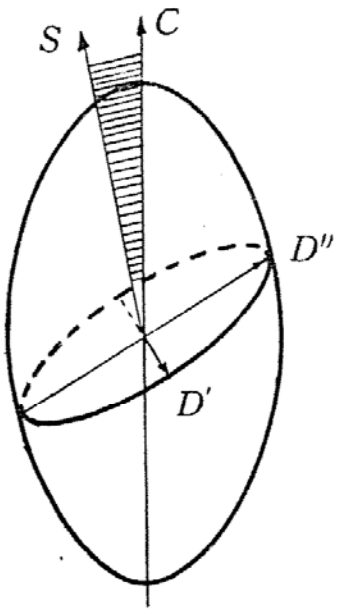


Fig. 4. Vibration directions in a uniaxial crystal.

Positive, negative crystals. Uniaxial crystals have been divided into two classes according to whether the refractive index of the ordinary ray (ω) or that of the extraordinary ray (ε) is the greater (Fig. 5).

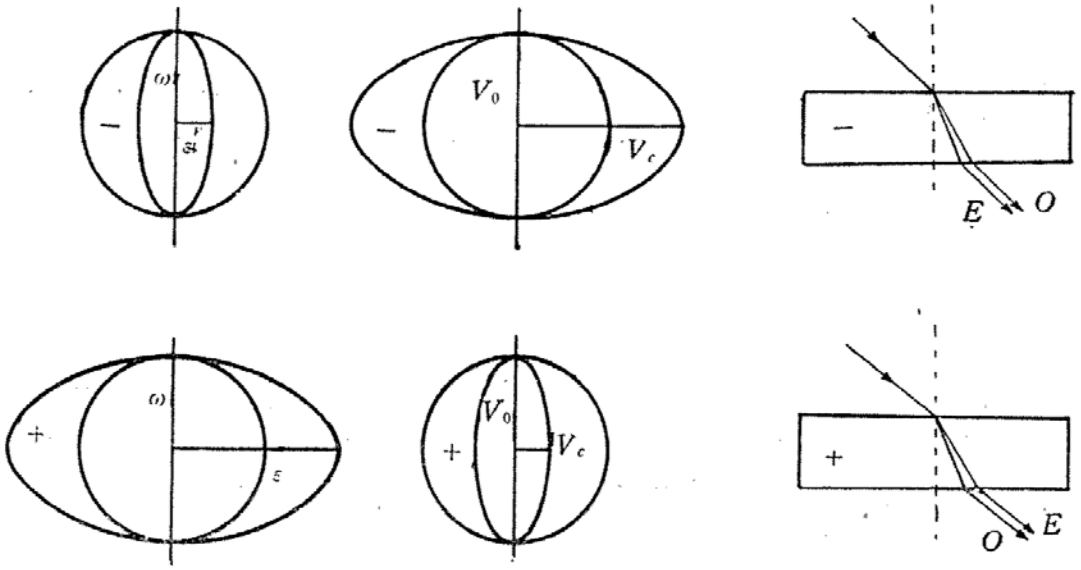


Fig. 5. Refraction and velocity of light in positive (+) and negative (−) uniaxial crystal.

When $\omega > \varepsilon$, the crystal is said to be a negative uniaxial crystal. Since the velocity is reciprocal to the refractive index, it follows that in negative crystals the ordinary wave (O) travels more slowly than the extraordinary wave (E), i. e., $v_0 < v_e$.

When $\omega < \varepsilon$, the crystal is said to be a positive uniaxial crystal, and the ordinary wave travels faster than the extraordinary wave, i. e., $v_0 > v_e$.

The two velocities are only equal when the wave normal is in the direction of the optic axis.

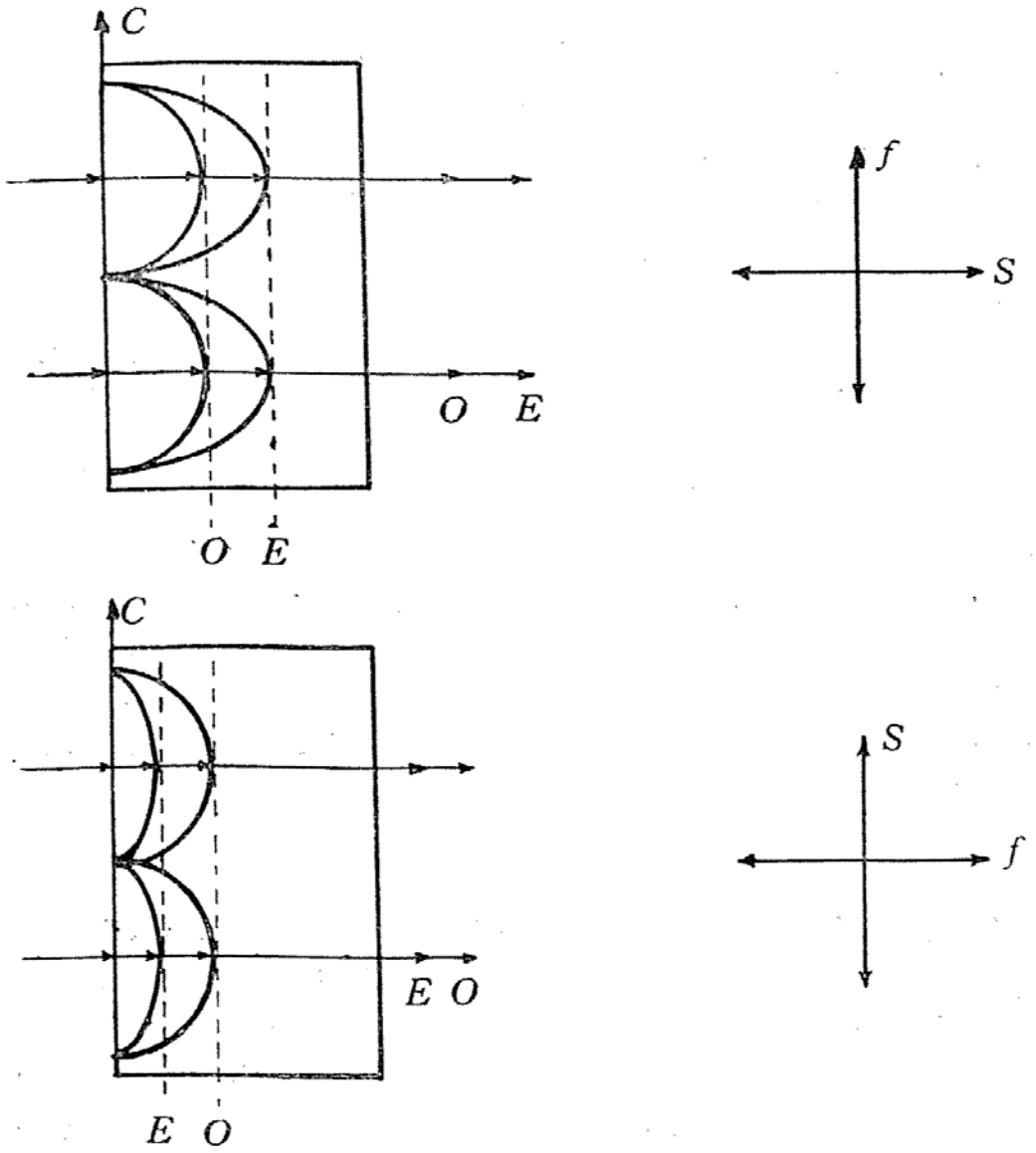


Fig. 6. Directions of the fast (f) and slow (s) axes in a negative and positive wave plate.

Let us consider the case that the crystal is cut so that the optic axis lies in the entrance surface. Most wave plates are cut in this way. Figure 6 shows a negative crystal plate (Fig. 6a) and a positive one (Fig. 6b). The direction of propagation of the incident light beam is perpendicular to optic axis *c*, which is drawn in vertical direction. Thus the principal planc is in the plane of the paper, and since the extraordinary ray, *E*, vibrates in that plane, its vibrations are vertical. The ordinary ray, *O*, vibrates perpendicularly to that plane. In figure 6a the *E* ray travels faster than the *O* ray, hence the *fast* axis of the crystal plate, *f*, is vertical and the *slow* axis, *s*, is horizontal. In figure 6b the reverse is true. The phase difference between the *E* ray and the *O* ray depends on the thickness of the plate and on the wavelength used.

Biaxial crystals. There exists a third group of crystals in which there are *two* directions of ordinary single refraction. The representation of variation of refractive index with vibration direction is an ellipsoid with three unequal principal axes (Fig. 3c). The three principal refractive indices are called α, β, γ, in order of increasing magnitude. Such ellipsoid has two circular sections, and if the light travels along a line perpendicular to either of these circular sections there is no double refraction.

Biaxial crystals are of the greatest interest to the crystallographer, but they are little used in optical instruments. In our applications two biaxial crystals (mica and gypsum) are useful because of their practically uniaxial behavior when use is made of their natural cleavages.

OPTICAL ACTIVITY

There exist crystals with optical characteristics which are more strange than double refraction, for instance, quartz. Since quartz belongs to the hexagonal system, one would expect that the behavior of quartz would be like that of calcite, in which the hexagonal axis is the one direction of single refraction. But the hexagonal axis of a quartz crystal—although it is the one direction of single refraction—has another strange feature, there is something

in that direction that rotates the vibration plane of polarized light. Fresnel, in 1827, supposed that there is something of a helical nature in the structure of quartz which is responsible for the rotation. We know now, as the result of X-rays study, that there is indeed a helical arrangement of atoms in the structure, like a left-handed screw in some crystals and a right-handed screw in others.

The rotation depends on the frequency of the light: the higher frequency blue light is rotated over twice as much as the lower frequency red light. Furthermore, the amount of rotation for a definite color of light is exactly proportional to the thickness of the quartz plate.

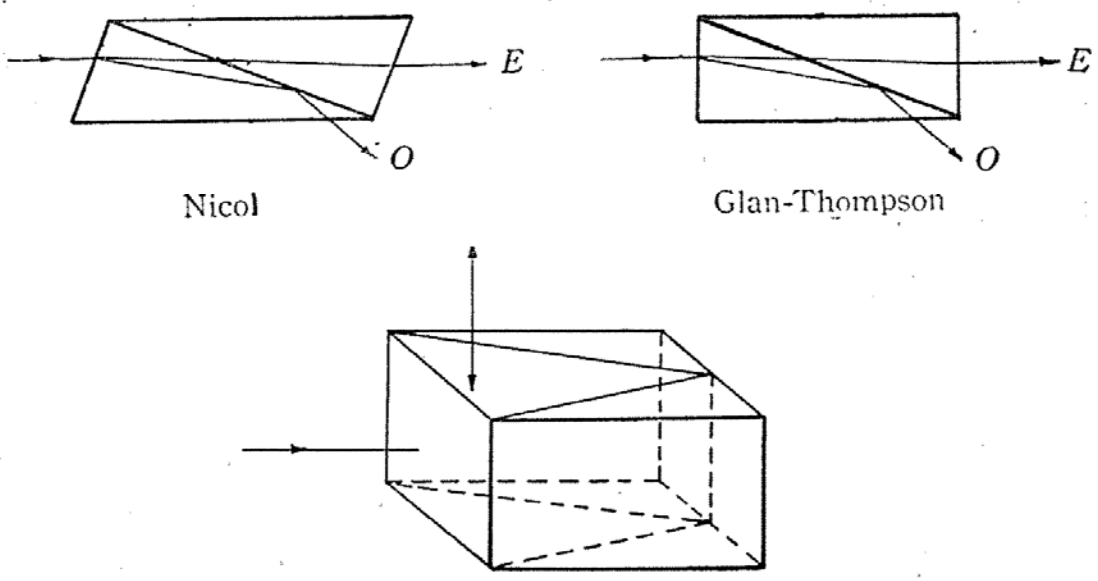
APPLICATIONS IN OPTICAL INSTRUMENTS

The applications of the physical properties of crystals in science are manifold. The optical and magnetic properties give valuable information concerning the crystal structure. The thermal, dielectric, piezoelectric, and elastic properties are used in the fabrication of crystal oscillators and resonators. Their peculiar actions upon light, i. e., birefringence and optical activity, enable the physicist to construct optical tools for his instruments. Some crystals have become essential components of optical apparatus. The understanding of their instrumental function is based on the knowledge of their behavior in polarized light.

Polarizing prisms. Two main types of polarizing prisms have been developed with the aid of uniaxial crystals. The principle of one type is the elimination of one of the two rays due to the double refraction of the crystal, while in the other type both the waves produced by birefringence are emergent from the crystal and can be used.

Nicol prisms. William Nicol in 1828 was able to eliminate the ordinary ray of a calcite crystal in such a way that only the extraordinary ray was left. The calcite crystal was cut at a particular angle and the two halves were cemented together with Canada balsam. Thus the ordinary ray is totally reflected and only the extraordinary ray is transmitted (Fig. 7). The plane of

vibration of this linearly polarized light beam is parallel to the short diagonal of the rhombic cross-section of the calcite prism. This original form was afterward altered and modified in many many ways, but the name "nicol" has been retained for all constructions based on Nicol's principle. An extensive survey of the various types has been given by Thompson in *Proceedings of the Optical Convention of 1905.*



Nicol Glan-Thompson

Ahrens

Fig. 7. Polarizing prisms.

Reasons for the modifications had been to make the field of view symmetrical, to increase the field, and to decrease the amount of calcite required. The Glan-Thompson prism and the Ahrens prism, both having quadratic cross-section, are now the standard nicols for high precision work in the visible region. The Foucault prism (rhombic cross-section) and the Glan prism (quadratic cross-section) are constructed for work within the extreme ultra-violet range. In other nicols these rays of short wavelength are absorbed by the Canada balsam whilst here the halves of the prism are divided by a layer of air.

Polaroids. A recent method to produce a beam of linearly polarized light makes use of pleochroic crystals. Pleochroism is called the variation in color for different directions in a crystal, the ordinary ray and the extraordinary ray are absorbed differently.

A well-known crystal of such kind is *tourmaline*, that in earlier times was often used instead of nicol prism. Another crystal showing black-and-white pleochroism is a compound crystal, know as herapathite. Based on this substance, Land in 1932 invented a very successful polarizing sheet, known as *polaroid*. It contained tiny crystals of herapathite, all oriented in the same way, embedded in a plastic sheet. Polaroid has the great advantage that it is available in large areas compared with a nicol prism, and owing to its cheapness, it has replaced nicol prisms in simpler types of polarizing instruments.

Polariscope. Every application of polarized light involves the action of two polarizing processes. One is necessary to "polarize" the initial light, the other is required to "analyze" the final light. The polariscope contains a polarizer for producing linearly polarized light and an analyzer for examining the polarization of the outcoming light. It is the prototype of all polarizing instruments: photometer, polarimeter, ellipsometer, interferometer, and others.

Double-image prisms. Figure 8 shows three prisms (each of calcite and of quartz) with their optic axes indicated by arrows and with their vibration directions of the ordinary and extraordinary rays. In the *Rochon* prism (Fig. 8a) the optic axis of the first prism is perpendicular to the entrance face, therefore, no separation of the two rays occurs. On passing into the second half the ordinary ray travels on unchanged in direction while the extraordinary is deviated further from the normal. In the *Senarmont* prism (Fig. 8b) the directions of the two rays are the same as with the Rochon prism, but the vibration directions are interchanged. Both prism are sometimes employed as polarizers in which case the deviated ray will be covered. In the *Wollaston* prism (Fig. 8c) the light beam in the first half travels as an ordinary ray and an extraordinary ray with different velocities, and on reaching the interface the ordinary ray is refracted as an extraordinary ray and the extraordinary ray as an ordinary ray. Both rays are deviated from the normal in opposite directions. The Wollaston prism as polarizer is widely used in spectropho-

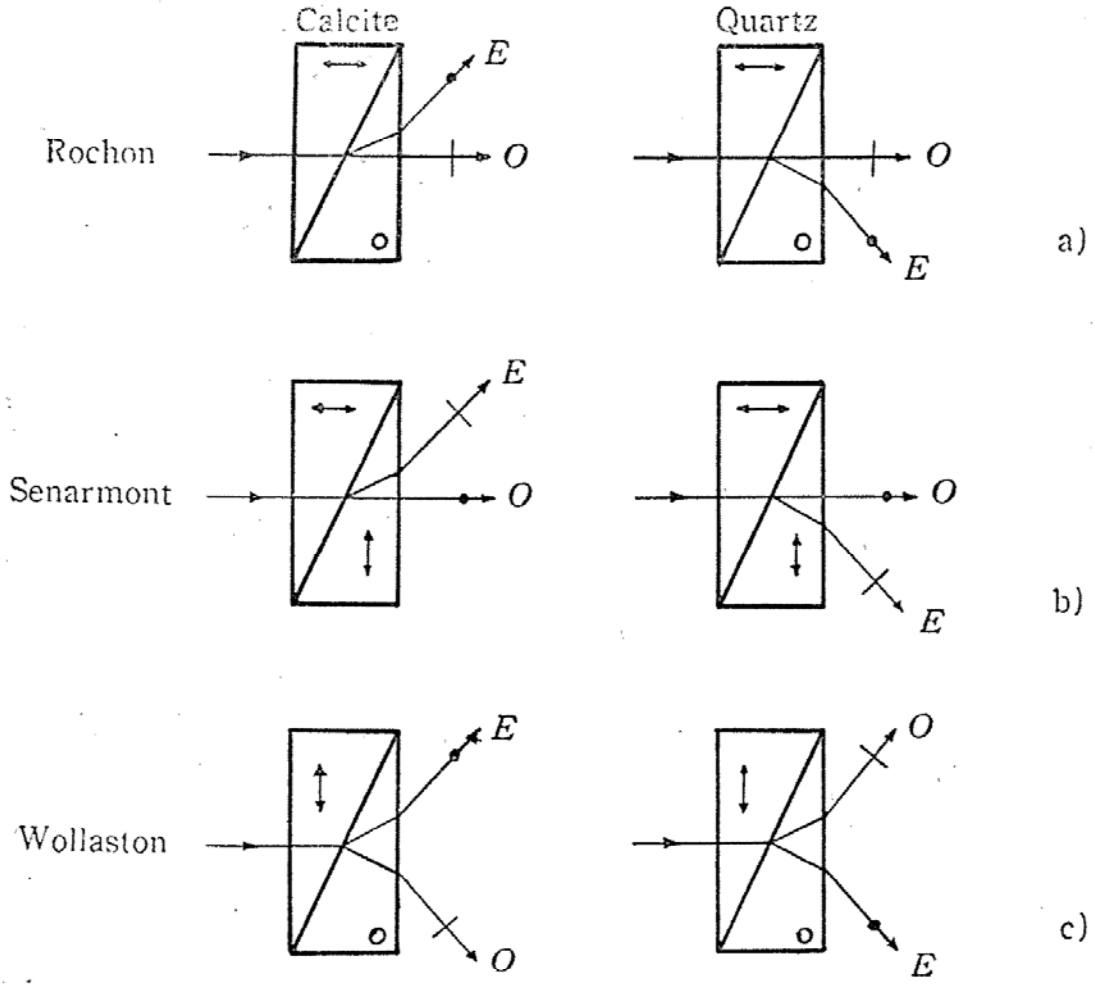


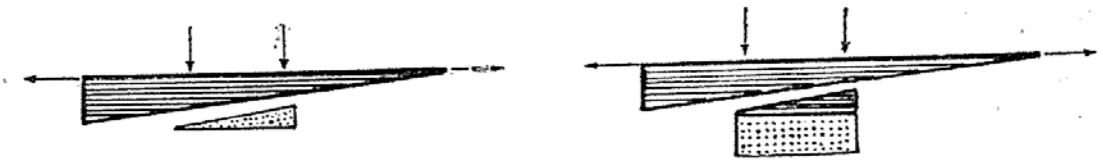
Fig. 8. Double-image prisms: a) Rochon, b) Senarmont, c) Wollaston.

tometers. It has recently been introduced into the ophthalmometer and the polarizing interferometer.

Wave plates. A plane parallel crystal plate with its optic axis in the plane parallel surfaces may be called a wave plate. Such plates are usually made of thin sheets of mica, gypsum, or of quartz or calcite cut parallel to the optic axis. Some wave-plates have special names according to their phase difference, e. g., quarter-wave plate, half-wave plate. There are variable wave plates that are very useful in optical instruments, namely, the Babinet and Soleil compensators. They are called compensators because they can compensate a given phase difference by varying their thickness.

Babinet compensator. It consists of two wedge-shaped prisms of quartz (or calcite) cut at a very small angle such that the optic

axes are parallel and perpendicular, respectively, to the two refracting edges (Fig. 9a). Thus the Babinet double prism is a Wollaston prism with very small refracting edges to avoid the deviations of the two beams of light emerging from the Babinet compensator. On the other hand, it may be considered a combination of two identical thin quartz wedges with their optic axes crossed. If linearly polarized light is incident normally on the compensator, it will be broken up into two components traveling in the same direction but with different velocities and with their vibration directions crossed. The two vibrations exchange velocities in passing from the first prism to the second. Thus one prism tends to cancel the effect of the other. Along the central section where both paths are equal the phase difference is zero. On each side of the center one vibration will be behind or ahead of the other because of the different path lengths. Between crossed nicols one sees a set of equally spaced dark bands. The calibrated shift of one wedge is used to determine the value of a phase difference under examination.



a b

Fig. 9. Thin-wedge-shaped prisms: a) Babinet, b) Soleil.

Soleil compensator. It is a modification of the Babinet compensator in order to get a uniform field of view. Two quartz wedges have their optic axes parallel to each other, and they are supplemented by a plane parallel plate having its optic axis at right angles to that of the wedges and having a thickness equal to that of the combined wedges in their zero position (Fig. 9b). One of the wedges can be displaced by a micrometer screw provided with a graduated drum. The effect is equivalent to that of a doubly refracting plate of uniform but variable thickness.

Rotating compensators. Another kind of variable wave plates are the so-called rotating compensators. The variation of the

phase difference in one and the same doubly refracting plate is accomplished by "tilting" the plate. The tilting can be measured by a graduated wheel which is calibrated to give directly the path difference introduced. Berek and Ehringhaus employed these compensators in the polarizing microscope.

OPTICAL TOOLS IN POLARIZING MICROSCOPE

The determination of the optical properties of many crystalline substances can only be carried out by the microscopic examination of small fragments of thin sections of crystals. Polarizing microscopes are fitted with a polarizer, an analyzer, and usually three accessory plates, namely, the quartz wedge, the quarter-wave plate, and the gypsum plate. The *thin quartz wedge* is a small plate of quartz cut in such a way that the optic axis coincides with the short side of the wedge or forms an angle of 45° with it. Its phase difference varies over the surface according to the thickness. If the crystal plate (quartz or mica) is of such thickness that the phase difference is equal to a quarter wavelength of the light used, the thin plane parallel plate is known as a *quarter-wave plate.* A third tool of the polarizing microscope is the *gypsum plate,* a thin cleavage section of the monoclinic crystal gypsum. Its thickness is such that a particular interference color (violet I) between crossed nicols is produced when its vibration directions are at 45° to those of the nicols. A very small retardation is sufficient to change this color to purple on one side or to indigo on the other, therefore called "sensitive tint".

HALF-SHADE DEVICES IN POLARIMETERS

All polarimeters, the simple one as well as the automatic spectropolarimeter measure the rotation of optically active substances. Precision polarimeters are provided with a half-shade device which divides the fields of view in halves, the fields of photometric comparison. There exist positions of the analyzer such that both halves appear equally bright. These positions of the analyzer without and with the substance are the essential elements in the measurement of optical activity.

The most frequently employed polarimetric devices will be mentioned.

Laurent's half-wave plate attached to the polarizer covers half the beam of the linearly polarized light emerging from the polarizer. The quartz plate is cut parallel to its optic axis. A half-wave plate is of such thickness that it gives a relative retardation of 180° between the principal vibration components (Fig. 10a).

Lippich's polarimeter has a second small nicol attached to the polarizer such that it covers one half of the larger nicol. Its plane of transmission forms a small angle with that of the larger one (Fig. 10b).

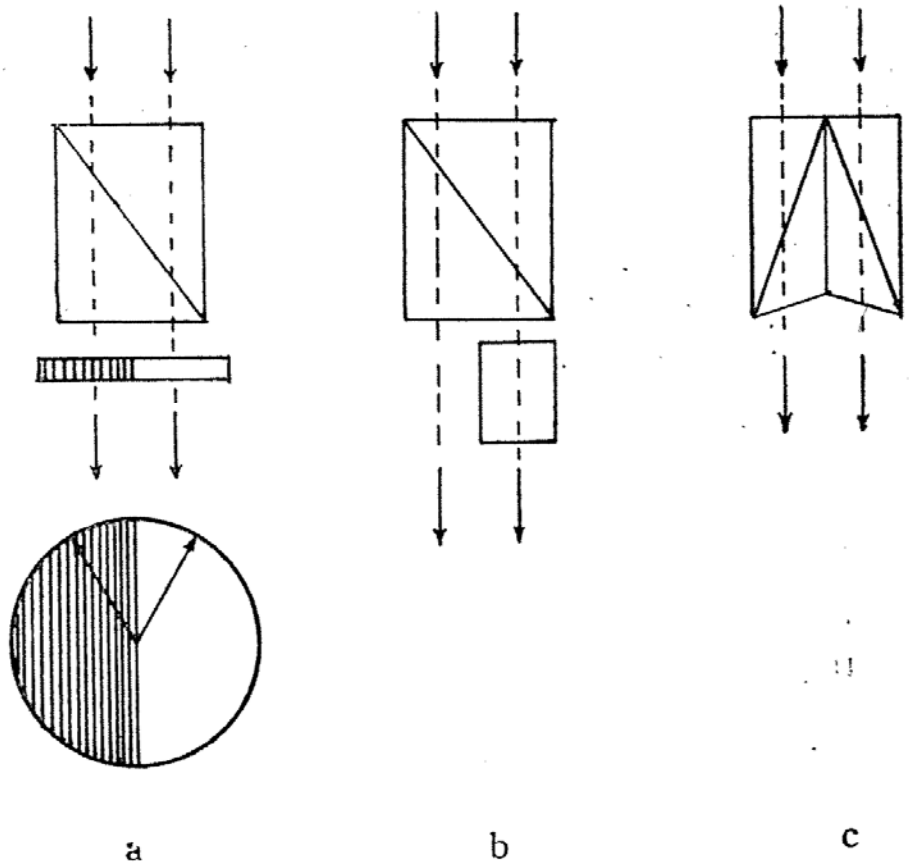


Fig. 10. Half-shade polarizers: a) Laurent, b) Lippich, c) Schoenrock.

Schönrock's polarimeter contains a double-field polarizer consisting of two equal Glan-Thompson prisms which are cemented together after a thin wedge has been removed from each of their interface (Fig. 10c). The light emerging from the two polarizers is linearly polarized in directions of vibration inclined at a small angle to

each other. This double-field nicol is sometimes used as double-field analyzer in the spectropolarimeter.

The above-mentioned half-shade polarimeters are equipped with a half-shade "polarizer". The most suitable double-field "analyzer" is the *rotating biplate* attached to the analyzer. The rotating biplate proposed by Soleil a century ago consists of semicircular plates of right-handed and left-handed quartz placed side by side. The plates are cut perpendicularly to the optic axis and are 3.75 mm thick, which is sufficient to rotate yellow light by 90°. It was originally designed for the use of white light. Later Nakamura showed that the biplate is very sensitive if the thickness is small (Fig. 11). In that case the rotations caused by the biplate on a linearly polarized beam are small for all frequencies.

All these half-shade polarimeters need monochromatic light on account of the rotatory dispersion of the substance under examination. Modern polarimeters designed for heterochromatic light are based on the principle of compensating the rotation by means of a quartz wedge. Most saccharimeters employ a kind of quartz wedge compensators.

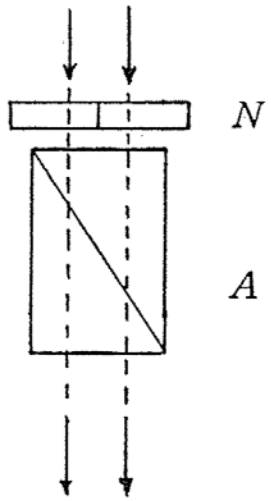


Fig. 11. Double-field analyzer—Nakamura plate (*N*) combined with analyzer (*A*).

ELLIPSOMETRIC DEVICES

The ellipsometer consisting of two polarizing prisms and a compensating device is designed to analyze elliptically polarized

light. The elliptic polarization may be produced by a doubly refracting medium in order to find its optical properties, or by metallic reflection for determining the optical constants, or by artificially produced double refraction (photoelasticity, electrooptic or magnetooptic effects). Some compensating devices really compensate the elliptic wave by transforming the elliptic polarization into a linear one. Other compensators only change something of the elliptic wave.

To the latter group belong Szivessy's single half-shade plate and the Brace compensator which consists of two doubly-refracting plates. One plate is rotatable and covers the whole field of view, the other plate is a thin half-shade plate. The material used for such plates is mica. It is especially convenient for making wave-plates because of the ease with which thin sheets can be split off.

Of the first group three compensating devices may be mentioned: the quarter-wave plate, the non-quarter-wave plate, and the "congruent" plates. The method of congruent plates uses doubly refracting plates producing the same physical effect as the elliptic wave. The doubly refracting plate must be able to produce the desired phase difference that compensates the given elliptic vibration.

Three types of doubly refracting plates of variable retardation may be distinguished. The Soleil compensator can vary its retardation by adjusting its thickness. The De Forest Palmer method varies the phase difference of an optical glass plate by tension. The Berek and Ehringhaus rotating compensators change the phase difference of a doubly refracting plate by tilting.

Half-shade devices are used in those ellipsometric methods where "linear" polarization enters the analyzer. The half-shade device must fulfill two purposes: to prove that the light emerging from the compensator is really linearly polarized, and to determine the vibration direction of this linear vibration. The Ramaseshan half-shade plate and the Richartz double biplate comply best with the two conditions.

Ramaseshan's double half-shade arrangement consists of a single plate one half of which is a Bravais biplate of low retardation,

the other half a Nakamura plate (Fig. 12a). Thus the field of view is divided into four quadrants. The Nakamura biplate is the above-mentioned thin rotating biplate. The Bravais biplate consists of two semicircular, doubly refracting plates with their edges juxtaposed and their fast axes at 90° to each other.

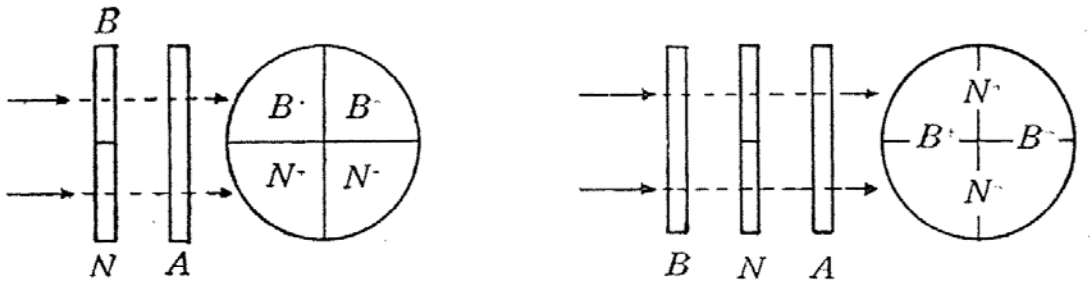


Fig. 12. Doubly-refracting biplates: a) Ramaseshan's analyzer, b) Richartz double biplate analyzer.

Richartz's double biplate consists of a Bravais biplate with a retardation of $\pi/2$, and a Nakamura plate. The Bravais biplate is placed in front of the Nakamura biplate so that the light beam under examination traverses first the Bravais biplate and then the Nakamura biplate. The dividing lines of the two plates are crossed so that the field of view is split into four quadrants. The double biplate is combined with the analyzer such that the fast axes of the Bravais biplate are parallel and perpendicular to the vibration direction of the analyzer (Fig. 12b).

Recently, some of these compensators have been employed in the polarizing microscope. J. Gahm, in his paper *Quantitative Measurements by Compensators in Polarized Light* (Zeiss-Mitteilungen, (1964), Vol. 3), reported on the use of three compensators: the Ehringhaus compensator, the quarter-wave (Senarmont) compensator, and the Brace-Koehler compensator. Furthermore, the rarely used non-quarter-wave (MacCullagh) compensator got a new impetus since a new, simple formula for analyzing an elliptic wave has been derived by M. Richartz in his paper *New Approach to the MacCullagh Method for Analyzing Elliptical Light* (J. Opt. Soc. Am. *56*, 198 (1966).

CONCLUSION

As the title of this paper suggests, crystals are tools for optical instruments. Thus one does not expect a detailed description of the apparatus in which crystal plates are employed. Nor is one surprised that no discussion is found of the theoretical foundation and the experimental procedures of the various instruments. Even the making and use of crystal plates for special purposes are only slightly touched.

The given explanation of the peculiar properties of crystals and their applications in polarizing microscope, polarimeter, and ellipsometer may rise the reader's interest for a deeper study of crystal structure and a better understanding of the nature of polarized light. A list of references is supplied to help the reader in finding the proper treatises on the intended subject.

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晶體在起偏振儀器中之用途

M. RICHARTZ, SVD.

摘　　要

晶體之兩種特性，旋光性及雙折射爲產生及分析偏振光之常用工具。作者論及起偏振稜鏡，旋光及雙折射雙片，波片及半蔭片，以及他們在測偏振尤其在測楕球偏振儀器中作爲補償裝置之應用。

ANGULAR-LIGHT-SCATTERING

HEINRICH J. HESSELFELD, SVD.

INTRODUCTION

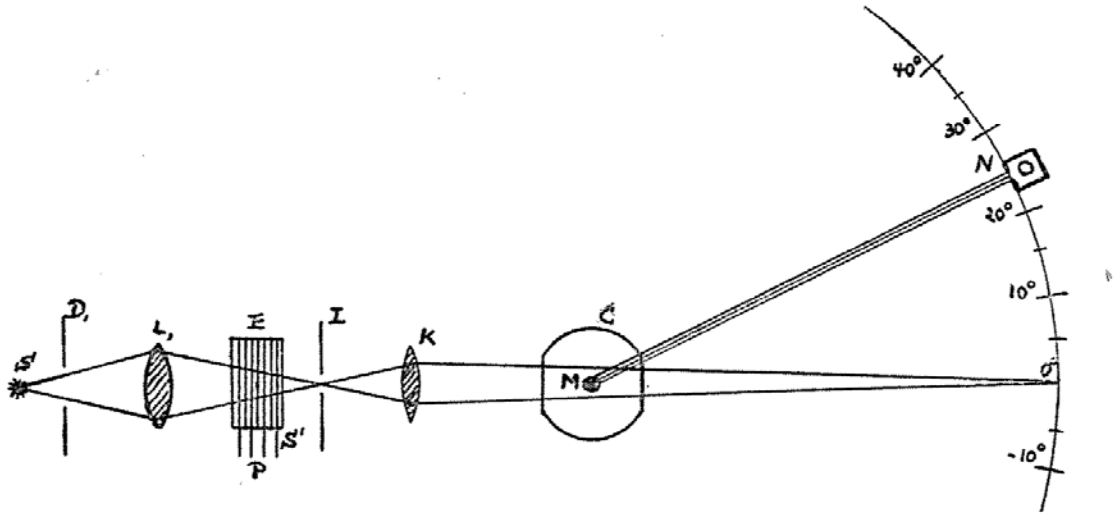
The scattering of light has become of increasing interest and importance to research in certain fields of physics, meteorology and colloid chemistry. Since 1940 a fair number of light-scattering instruments have been described in the literature, especially in connection with the aim of determining molecular weight. Principally, this has been done on visual and photographic apparatus. However, the photo-electric means of scattering-measurements offers the advantage of greater precision and sensitivity.

A photoelectric photometer for this purpose comprises essentially a stable light source with monochromatic filters, a lens for projecting a narrow beam of light through the center of the scattering cell, a phototube mounted on an arm capable of rotation about a vertical axis, and a sensitive linear D.C. feed-back amplifier and output meter.

The scattering apparatus built for this work followed in its essentials rather closely the one constructed by W. Henry Aughy and F.J. Baum of the E.I. du Pont de Nemours Company, Wilmington, Delaware, as described under "Angular-Dependence Light Scattering—A High-Resolution Recording Instrument for the Angular Range 0.05—140°" (J. Opt. Soc. Am. 44, 833–837 (1954)).

OPTICAL SYSTEM

By means of a combination of lenses, slits and filters an approximately parallel, but slightly converging beam of light passes through the sample under study and is absorbed in the light trap. The level of light intensity of the primary beam is varied in steps by an optical attenuator. Scattered light to be measured is received by a small aperture placed in front of a photomultiplier-tube which travels at selected speeds in an arc about the sample. The phototube covers a useful angular range of $-3°$ to $120°$.



Graph 1

PRIMARY LIGHT BEAM OPTICS

The light source S is a mercury arc lamp of type H 100 A $B8-4/T$ provided with horizontal and vertical adjustment. The source aperture D_1 is a 24 mm diameter circular opening in the lamp housing. The lens L_1 ($f = 87$ mm, $d = 36$ mm) images the source at approximately unit magnification onto the main slit I. A monochromatic filter combination E is placed between lens L_1 and slit I to provide the proper illumination for the scattering sample. Among those, one precision interference filter isolates the mercury green line (5461 A°). Four removable neutral filters, having densities of 0.3, 0.6, 0.9, and 1.2, transmit approximately 1/2, 1/4, 1/8, and 1/16 of the incident mercury green light. By particular combinations of these, the beam intensity is rapidly adjusted in steps of 1/2 from unity to about $1/1024^{th}$ of the initial intensity. A shutter S, operated manually, closes the light beam completely, whereas a pinhole shutter ($d = 0.25$ mm) cuts the intensity down by a factor of about 1/200. This pinhole shutter could easily be replaced by a polarizer or another neutral filter if required.

Altogether, these components constitute a simple illuminating system for the main slit I. Provision is made to change the width and height of slit I. However, throughout the experiment a slit of 0.02 mm in width and 2 mm in height was employed.

Placed between the main slit *I* and sample *C*, the small lens *K* forms one of the essential parts of the scattering instrument. It focuses an image of slit *I* onto the slit-opening of the receiving photo-multiplier if the turntable is at position zero degrees. The lens is 13 mm in diameter with a focal length of 38 mm. Its function is to minimize the stray-light inside the light-tight scattering-box and to make the measurement of scattered light very close to the main beam possible.

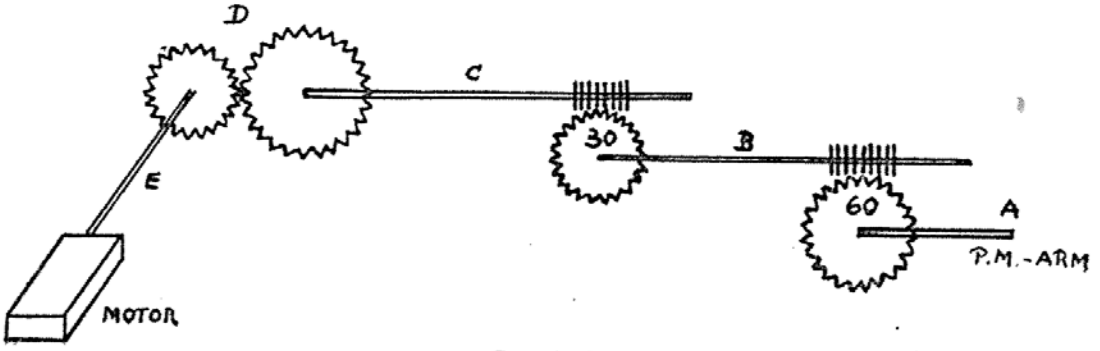
RECEIVING OPTICS

For high sensitivity, stability and low dark current, the multiplier phototube RCA 1 P 21 was selected and mounted on a movable arm. The axis of rotation of the arm is denoted by *M*, also the center of the light scattering cell with the included sample. A stationary post comes up through the center of the turntable and is used as a fixed plate holding the sample cell stationary and keeping it normal to the incident beam of light. Thus the center-point of the sample is also the center of the arc along which the receiving slit *N* and the multiplying phototube moves. The radius of this arc is 29.5 cm.

The height of the receiving slit *N* is determined by the 6.4 mm circular aperture of the brasstube in which the 1 P 21 tube and its bank of dynode resistors is inclosed. Slit width of 0.09 cm was used for the entire experiment giving an angular resolution of about 0.17°. The slit is adjustable.

MECHANICAL COMPONENTS

The phototube-arm is driven by means of a synchronous 1 rpm. —motor through a compound gear drive:



Graph 2

A precision worm-gear drive *A* has a ratio of 1/1800 (1/30 compounded with 1/60). By appropriate gearing of system *D*, the driven shaft *C* turns at speeds of 1/2, 1, 5/2, 5, and 10 revolutions per minute, producing rotational rates of the turntable of 0.1, 0.2, 0.5, 1, and 2 degrees per minute of shaft *A*.

A manually operated crank on the end of shaft *C* moves the phototube-arm at a maximum speed of about 26 degrees per minute, which is about 12 times faster than the highest motor gearing drives the tube-arm.

The angular position of the arm is indicated in degrees by an angle counter. This counter is geared to indicate angles to 0.1 degrees.

A microswitch is activated by the motor-shaft *E* once per revolution, such that the angular position of the receiver is marked on the chart paper once per minute.

ELECTRIC COMPONENTS

Light-Source

The H-100 A 38 mercury arc is fed directly by a D.C. generator. The lifetime of this type of mercury lamp should be about 6,000 hours. Therefore the lamp is left on continuously, since it has been found that maximum stability of the arc results only from uninterrupted operation. The supply voltage was 127 volts and the ballast resistance 145 Ohms. The resulting lamp current was 0.71 Amps.

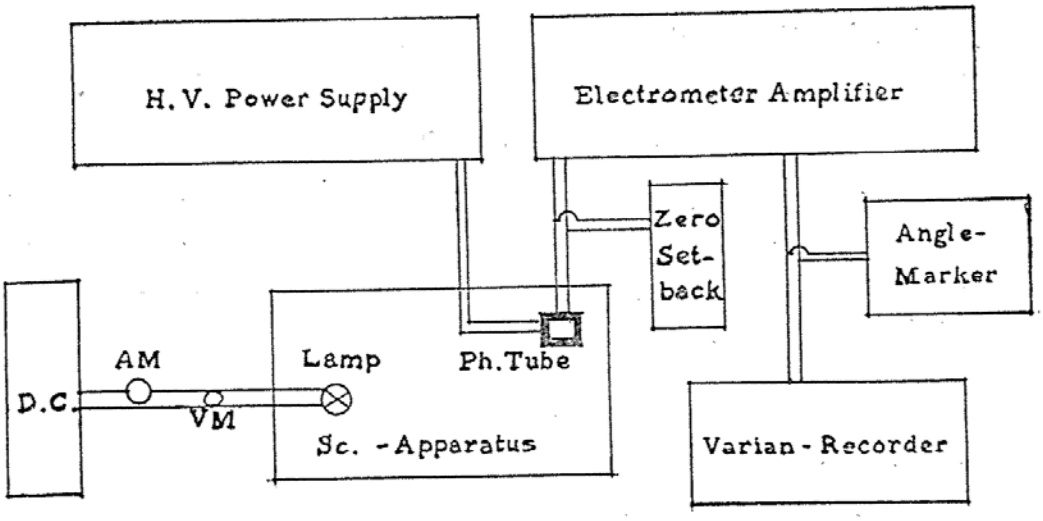
High Voltage Power Supply

The multiplier phototube is an RCS 1 P 21, selected for high sensitivity, stability and low dark current. Power is supplied to it from a RIC precision high-voltage power supply, model 515. A voltage of 700 volts is fed into a voltage divider consisting of ten 240 K resistors. These supply the accelerating voltage to the dynodes of the 1 P 21.

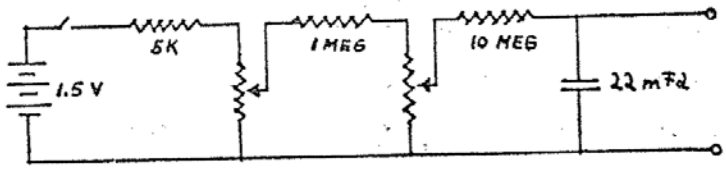
Recording Features

The output of the phototube is supplied directly to an electrometer amplifier "eh," model 201 C, manufactured by the E. H. Research Laboratories, Oakland, California. It has a maximum

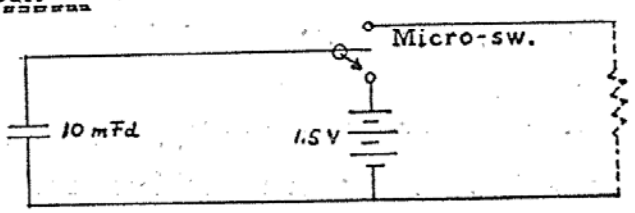
BLOCK-DIAGRAM



ZERO-Setback Circuit



Angle-Marking Circuit



Graph 3

input resistance of 3×10^{12} Ohms and a minimum input resistance of 10^6 Ohms. The electrometer has a sensitivity of 10×10^{-7} Amps. fullscale for the minimum input resistance. By means of a selector switch the sensitivity can be increased theoretically to 10×10^{-14} Amps.

A zero setback circuit was used to eliminate the dark current generated by the photomultiplier-tube.

The output of the Electrometer goes to a 100 mV. Varian stripchart recorder, model G 10. The recorder is provided with a marking system in order to index the angular position of the receiving phototube once per minute. The chart speeds of the Varian recorder are 4″ per minute or 1″ per minute. A paper with 100 divisions per full scale is used.

THEORY

In studying the effects of light scattering a sound knowledge of the scattering characteristics of particles is necessary. These characteristics differ with the shape of particles, as well as with their size, compared to the wavelength of the incident light.

This problem was solved theoretically over fifty-five years ago by G. Mie. His formulas are exact solutions of Maxwells equations for spherical particles. He integrated Maxwell's equations for the electric and magnetic field inside and outside a particle and calculated the amplitude of the waves of light radiated by the particle in various directions. The exact solutions appear in the form of series which converge more slowly with increasing radius of the particle if the wavelength of incident light remains fixed.

The diffraction theory undertakes to solve Maxwell's equation for a plane wave coming from infinity hitting any surface of discontinuity. An exact solution can be found only for simple geometric surfaces of discontinuity. In such cases the equation reduces to a boundary value problem for ordinary differential equations.

Mie's Theory

G. Mie solved the case for an incident plane wave falling upon a sphere of radius r. The surrounding medium is transparent,

homogeneous and isotropic. The incident wave induces forced oscillations of free and bound charges, inducing a secondary electric and magnetic field each of which consists of two parts, namely one inside the sphere and another outside the sphere. We ask for the intensity of the scattered light as a function of the scattering angle θ. Thus, the intensity scattered, I, is a function of four parameters, r, λ, θ, and n;

$$\text{namely} \quad I = I_0 f(r, \lambda, n, \theta) \tag{1}$$

The solution has the form of infinite series, the coefficients of which are determined by infinite series of Bessel functions and Legendre polynomials.

We define the following terms:

n = index of refraction (of the sc. particle relative to the dispersive medium)

r = radius of the scattering particle

λ = wavelength of incident light in the surrounding medium

$\alpha = 2\pi r/\lambda$ = size parameter

$\beta = n\alpha$

θ = scattering angle

$x = \cos\theta$

The plane of observation is the plane containing the direction of the incident wave and the direction of the scattered wave. If the incident radiation is unpolarized and its intensity is I_0, then the intensity of the radiation scattered in the direction θ is given by Mie as

$$I\{n, \theta\} = I_0 \frac{1}{\alpha^2}(I_1\{\alpha, n, \theta\} + I_2\{\alpha, n, \theta\}) \tag{2}$$

The quantities I_1 and I_2 are called intensity functions. They have the following meaning: The intensity functions I_1 and I_2 are proportional to the magnitude of the two incoherent, plane polarized components scattered by one particle. I_1 is proportional to the intensity whose electric oscillations are perpendicular to the plane of observation, i.e., polarized in the horizontal plane. I_2 is proportional to the intensity whose electric oscillations are in the plane of observation, i.e., polarized in the vertical plane.

This result already shows that the scattered radiation is always polarized if the incident radiation is unpolarized. The intensity functions derived by Mie are:

$$I_1 = \left| \sum_{m=1}^{\infty} \frac{2m+1}{m(m+1)} (a_m \pi_m + b_m \tau_m) \right|^2$$
$$I_2 = \left| \sum_{m=1}^{\infty} \frac{2m+1}{m(m+1)} (a_m \tau_m + b_m \pi_m) \right|^2 \qquad (3)$$

It is indicated that the absolute value of the complex argument has to be used. Further it is seen that the scattered wave is composed of various partial waves and the amplitude of these partial waves depend on a_m and b_m. The term in these series are defined as follows:

The amplitude functions a_m and b_m are complex numbers:

$$a_m\{\alpha, n\} = (-1)^{m+1/2} \frac{S'_m(\beta) S_m(\alpha) - n S'_m(\alpha) S_m(\beta)}{S'_m(\beta) B_m(\alpha) - n B'_m(\alpha) S_m(\beta)}$$

$$b_m\{\alpha, n\} = (-1)^{m+3/2} \frac{n S'_m(\beta) S_m(\alpha) - S'_m(\alpha) S_m(\beta)}{n S'_m(\beta) B_m(\alpha) - B'_m(\alpha) S_m(\beta)} \qquad (4)$$

The terms S_m, S'_m, C_m, B_m, and B'_m are given by:

$$S_m\{z\} = \left(\frac{\pi z}{2}\right)^{1/2} J_{(m+1/2)}\{z\}$$
$$C_m\{z\} = (-1)^m \left(\frac{\pi z}{2}\right)^{1/2} J_{(-m-1/2)}\{z\}$$
$$B_m\{z\} = S_m\{z\} + i\, C_m\{z\}$$
$$S'_m\{z\} = \frac{\partial S_m(z)}{\partial z}$$
$$B'_m\{z\} = \frac{\partial B_m(z)}{\partial z} \qquad (5)$$

The argument z takes of the values α or β in Eq. (4) and

$J_{m+1/2}$ = Bessel function of positive half order,

$J_{-m-1/2}$ = Bessel function of negative half order.

The amplitude function a_m can be interpreted physically as the m^{th} electric partial wave, whereas b_m is the m^{th} magnetic partial wave. Hence the solution (3) gives the scattered field as a spherical wave composed of two groups of partial waves. The first group, the electrical partial wave a_m is that part of the

solution for which the radial component of the magnetic vector in the incident wave is zero. Similarly, the second group, the magnetic partial wave b_m refers to the zero radial component of the electric vector.

The values of the amplitude functions a_m and b_m depend on the material (n) and the size of the particle (α).

The partial waves can be considered as coming from an *electric or magnetic multipole field.* The first partial wave comes from a dipole, the second from a quadrupole, and so on. The number of partial waves necessary for numerical computations increases with α.

The coefficients π_m and τ_m are essentially *angular functions* containing the scattering angle θ, but are completely independent of n and α:

$$\pi_m = \frac{dP_m}{dx}$$

$$\pi'_m = \frac{d^2P_m}{dx^2}$$

$$\tau_m = x\pi_m - (1 - x^2)\pi'_m \qquad (6)$$

where P_m is the Legendre polynomial of degree m. The functions π_m and τ_m involve the first and second derivative of the Legendre polynomial of order m and argument $z = \cos\theta$. For the third partial wave e. g.:

$$\pi_3 = \frac{15}{2}\cos^2\theta - \frac{3}{2}$$

$$\tau_3 = \frac{45}{2}\cos^3\theta - \frac{33}{2}\cos\theta$$

GENERAL OPERATIONAL PROCEDURE

In general, the sample-cell is mounted normally to the incident light on the stationary table above the turning arm center. The flat windows of the cell have to be carefully adjusted in order to avoid any possible stray light which could be due to angular reflections. This adjustment is made by turning the cell till the sharpest possible image of the main slit is seen at the zero-degree point of the phototube.

The apparatus is enclosed in a light-tight box. Lamp intensity and Varian correspondence are controlled and adjusted. Then a complete run is made, first without sample and cell, in order to record the stray-light (which was found to be neglegible at any angle bigger than 20 degrees). While the recording phototube is turned over the desired angular range, the illumination level is being increased as necessary by the removal of neutral filters.

The scanning rates are controlled. At small angles very low speeds are wanted to give the operator time for manual adjustment of the attenuator and to give a satisfactory speed of the chart record.

The phototube is kept at a constant value of potential throughout the run. For the 1 P 21 the value of 700 volts seems to be practical.

A main point of operation consists in suppressing the dark current of the photomultiplier which is done by closing the primary light beam during a short time interval and re-adjusting the zero-setback circuit.

SPECIAL PERFORMANCE OF THE EXPERIMENT

By Mie's theory the scattering functions for spherical particles are well known, and by means of these functions the theoretical intensities for angular scattering from different sizes of spheres were computed. The constructed scattering apparatus was tested and calibrated by comparing the experimental scattering data from single-sized spheres with the computed theoretical intensities over a broad range of angular scattering.

A standard scattering solution was supplied by Dr. J. Vanderhoff of the Dow Physical Research Company, Midland, Michigan. This standard solution consisted of pure water with polystyrene latex spheres of diameter 3650 Angstr. suspended in the water. The relative index of refraction with respect to water was given for these particles to be 1.20.

Graph 6 shows the continuous curves for the computed intensities, where different sizes of scattering centers show different curves. Actually, there were intensities computed for five different

Since the mapping g from S onto T is also a homomorphism, it follows that the product mapping ng from S onto T/R^* is also a homomorphism. we show that ng is open. Let U be an open set in S. Since g is open, $g(U)$ is open in T. Also, n is an open map; so $ng(U)$ is open in T/R^*. This shows that ng is an open topological homomorphism.

Now S and T/R^* are two topological semigroups. S satisfies the condition A, and ng is an open topological homomorphism from S onto T/R^*. Hence, by theorem 2, ng induces a homomorphic equivalence relation R_{ng} on S, and by theorem 3, there is a topological isomorphism between S/R_{ng} and T/R^*. Denote R_{ng} by R. Then we have $S/R = T/R^*$. We call this isomorphism h. This completes the proof.

Example. To illustrate some of the foregoing theorems we give the following example.

Let $(0, \infty)$ be the semigroup of positive real numbers with addition as its operation and with the usual topology as its topology. Let

$$S = [(x, y) \mid x \in (0, \infty),\ y \in (0, \infty)]$$

and let the vector addition be defined in S; *i.e.*,

$$(x, y) + (x^*, y^*) = (x + x^*, y + y^*).$$

The set S with the vector addition is a semigroup.

We topologize the semigroup S with the usual product topology P; *i.e.*, the family of subsets

$$B = [(U \times V) \mid U, V \text{ are open in } (0, \infty)]$$

is the base for the topology P in S.

We define a relation R on S as follows: for (x, y), $(x^*, y^*) \in S$, $(x, y)\ R\ (x^*, y^*)$ if and only if $x = x^*$. It is easy to see that this relation R is an equivalence relation, because the equation $x = x^*$ is reflexive, symmetric, and transtive. We show that the equivalence relation R is also homomorphic.

Suppose that (x_1, x_1), (x_1^*, y_1^*), (x_2, x_2), $(x_2^*, x_2^*) \in S$ such that

$$(x_1, y_1)\ R\ (x_2, y_2) \text{ and } (x_1^*, y_1^*)\ R\ (x_2^*, y_2^*).$$

Then $x_1 = x_2$ and $x_1^* = x_2^*$. From these equations we have

$$x_1 + x_1^* = x_2 + x_2^*.$$

Hence

$$(x_1 + x_1^*,\ y_1 + y)\ R\ (x_2 + x_2^*,\ y_2 + y_2^*).$$

This means that the relation is a homomorphic equivalence relation.

The equivalence classes mod R are of the form: $\{x\} \times (0, \infty)$. We denote the set of all equivalence classes mod R by S/R. We define an operation in S/R in the following manner. Let $\{x\} \times (0, \infty)$ and $\{y\} \times (0, \infty)$ be any two elements in S/R. Then

$$\{x\} \times (0, \infty) + \{y\} \times (0, \infty) = \{x + y\} \times (0, \infty).$$

Since for any two positive real numbers x and y the number $x + y$ is unique, the operation defined on S is well-defined. This operation is associative, because the operation of addition in the set of positive real numbers is associative. Hence the set of equivalence classes mod R with the operation of addition is a semigroup.

We define the natural mapping n from S onto S/R by assigning each element (x, y) to the equivalence class $\{x\} \times (0, \infty)$. We show that the mapping n is an algebraic homomorphism. Let (x, y) and (x^*, y^*) be two arbitrary elements in S. Then $n(x, y) = \{x\} \times (0, \infty)$ and $n(x^*, y^*) = \{x\} \times (0, \infty)$ and $n[(x, y) + (x^*, y^*)] = \{x + x^*\} \times (0, \infty)$. But

$$n(x, y) + n(x^*, y^*) = \{x\} \times (0, \infty) + \{x^*\} \times (0, \infty) = \{x + x^*\} \times (0, \infty).$$

Hence

$$n(x, y) + n(x^*, y^*) = n(x, y) + (x^*, y^*).$$

This shows that the mapping n is an abstract homomorphism.

Now we topologize the semigroup S/R with the quotient topology with respect to the mapping n. That is, a subset $U \times (0, \infty)$ is open in S/R if and only if $n^{-1}[U \times (0, \infty)]$ is open in S. We observe that

$$n^{-1}[U \times (0, \infty] = U \times (0, \infty).$$

Hence a subset $U \times (0, \infty)$ of S/R is open if and only if the subset U is open in the usual topology of $(0, \infty)$.

Since S satisfies the condition A, the parts a), and b) follow from theorem 1.

Before proving part c), we wish to show that the mapping h defined in the theorem is well-defined.

Let A be any element of S/R_g and let a^* and a^{**} be any two elements of A as a subset of S. Then

$$a^* = a^{**} \bmod R_g.$$

This implies

$$g(a^*) = g(a^{**}).$$

Hence

$$h(A) = g(a^*) = g(a^{**}).$$

This shows that h is well-defined.

Also h is a one to one mapping. For each $A \in S/R_g$ there corresponds a unique value

$$h(A) = g(a)$$

in T as shown above. Now since g is a mapping from S onto T, for each $t \in T$ there is an element $a \in S$ such that $t = g(a)$, by definition of R_g, $a = b \bmod R_g$ if and only if $g(a) = g(b)$. It follows that for each $g(a) = t$, there is one and only one equivalence class $A \bmod R_g$ such that $h(A) = g(a) = t$. Hence h is a one to one mapping.

We further show that h is an algebraic homomorphism. Let A and B be any two elements in S/R_g. Then

$$h(AB) = g(ab) = g(a)g(b) = h(A)h(B),$$

where a and b are arbitrary elements of A and B respectively. This shows that h is an algebraic homomorphism.

We show also that h is continuous. Let A be an element in S/R_g such that $h(A) = t$, and let W be an open neighborhood of t. Since $h(A) = g(a)$ for every $a = A$, and since g is continuous, for every $a \in A$, there is an open neighborhood U_a of a such that $g(U_a) \subset W$. Choose such an open neighborhood U_a for every $a \in A$.

Then $\bigcup_{a\in A}(U_a)$ is a neighborhood A in S and $n[\bigcup_{a\in A}(U_a)]$ is an open neighborhood of the element A in S/R_g. But

$$g[\bigcup_{a\in A}(U_a)] = h\{n[\bigcup_{a\in A}(U_a)]\} \subset W.$$

So for any neighborhood W of $h(A)$, we have found a neighborhood $n[\bigcup_{a\in A}(U_a)]$ of A such that $h\{n[\bigcup_{a\in A}(U_a)]\} \subset W$. This shows that h is continuous.

Finally we show that h is open. Let U^* be an open subset of S/R_g. Since the natural mapping n from S onto S/R_g is continuous, $n^{-1}(U^*)$ is an open subset in S. Also, g is an open mapping from S onto T. So $g[n^{-1}(U^*)]$ is open in T. But

$$g[n^{-1}(U^*)] = h\{n[n^{-1}(U^*)]\} = h(U^*).$$

Hence $h(U^*)$ is open in T. This shows that h is an open mapping. This completes the proof.

We can sum up theorems 1, 2, and 3 by the following form of the fundamental theorem of homomorphism of the topological semigroups:

If the semigroup S satisfies the condition A, then the quotient set S/R is a topological semigroup with the quotient topology, and the natural mapping n from S onto S/R is an open topological homomorphism. Conversely, if g is an open homomorphism from S onto a semigroup T, then T is topologically isomorphic to the quotient semigroup S/R_g, where R_g is a homomorphic equivalence relation defined by

$$a\ R_g\ b \text{ if and only if } g(a) = g(b);\ a, b \in S.$$

Thorem 4. (The First Isomorphism Theorem.) Let S and T be two topological semigroups both satisfying the condition A. Let g be an open homomorphism from S onto T and let R^* be a homomorphic equivalence relation defined on T. Then there is a homomorphic equivalence relation R valid in S and there is a mapping h from S/R onto T/R^* which is a topological isomorphism.

Proof: Since R^* is a homomorphic equivalence relation on T, by theorem 1, T/R^* is a topological semigroup and the natural mapping n from T onto T/R^* is an open topological homomorphism.

classes mod R, and let $XY = Z$. Then by definition of the operation in S/R, for any $x \in X$ and $y \in Y$, $xy \in Z$. Since the natural mapping n assigns each element to the class it belongs, we have

$$n(X) = X,\ n(Y) = Y, \text{ and } n(xy) = n(z) = Z.$$

These equations together with the equation $XY = Z$ imply that $n(xy) = n(x)n(y)$. This shows that the natural mapping n is an abstract homomorphism from S onto S/R.

Now let U^* be an open set in S/R. By the definition of the quotient topology for S/R, $n^-(U^*)$ is open. Hence n is continuous.

Let U be an open set in S. Since S satisfies the condition A, $n^{-1}[n(U)]$ is open. Then by the definition of the quotient topology, $n(U)$ is open. Hence n is open.

Now we wish to show that the semigroup operation in S/R is continuous. Let A and B be two arbitrary elements in S/R such that $AB = C$. Suppose that W^* is an open neighborhood of C. Then $W = n^{-1}(W^*)$ is an open neighborhood of C, considered as a subset of S. Since the semigroup operation in S is continuous, for every $a \in A$ and every $b \in B$ such that $ab = c$, there is an open neighborhood U_a of a and an open neighborhood V_b of b such that $U_aV_b \subset W$. Choose such a neighborhood U_a for every $a \in A$ and such a neighborhood V_b for every $b \in B$. Then

$$\bigcup_{\substack{a \in A \\ b \in B}} U_aV_b = [\bigcup_{a \in A} U_a][\bigcup_{b \in B} V_b] \subset W.$$

Now $\bigcup_{a \in A} U_a$ is an open neighborhood of A in S, and n is an open mapping. It follows that $n[\bigcup_{a \in A} U_a]$ is an open neighborhood of the element A in S/R. Similarly $n[\bigcup_{b \in B} V_b]$ is an open neighborhood of of the element B in S/R. Since $[\bigcup_{a \in A} U_a]\ [\bigcup_{b \in B} V] \subset W$, we have

$$n[\bigcup_{a \in A} U_a]\ n[\bigcup_{b \in B} V_b] = n[\bigcup_{a \in A} U_a \bigcup_{b \in B} V_b] \subset n(W) = W^*$$

Hence we have found an open neighborhood $n[\bigcup_{a \in A} U_a]$ of A and an open neighborhood $n[\bigcup_{b \in B} V_b]$ of B such that $n[\bigcup_{a \in A} U_a]\ n[\bigcup_{b \in B} V_b] \subset W^*$. This shows that the semigroup operation in S/R is continuous. With this, proof of the theorem is complete.

Theorem 2. If S and T are two semigroups and g is a homomorphism from S onto T, then g induces a homomorphic equivalence relation R_g on S.

Proof: We define a relation R_g on S in the following manner. Suppose that a and a* are two elements of S, then

$$a = a^* \bmod R_g \text{ if and only if } g(a) = g(a^*).$$

Evidently, R_g is an equivalence relation. We show that R_g is homomorphic, i.e., if $a, a^*, b, b^*, \in S$ such that $a = a^* \bmod R_g$ and $b = b^* \bmod R_g$, then $ab = a^*b^* \bmod R_g$. Now $a = a^* \bmod R_g$ implies $g(a) = g(a^*)$, and $b = b^* \bmod R_g$ implies $g(b) = g(b^*)$. These two equations imply that $g(a)g(b) = g(a^*)g(b^*)$. Since g is a homomorphism, we have $g(a)g(b) = g(ab)$ and $g(a^*)g(b^*) = g(a^*b^*)$. Hence $g(ab) = g(a^*b^*)$. This means that $ab = a^*b^* \bmod R_g$. This completes the proof.

Theorem 3. Let S and T be two topological semigroups and let g be an open homomorphim from S onto T. Then

a) S/R_g is a topological semigroup with the quotient topology;
b) the natural mapping n from S onto S/R_g is an open homomorphism;
c) the mapping h from S/R_g onto T defined by $h(A) = g(a)$ for any $a \in A$ as a subest of S and $A \in S/R_g$ is a topological isomorphism.

Proof: By theorem 2, g induces a homomorphic equivalence relation R_g on S. Let S/R_g be the quotient set. Then S/R_g is a semigroup. Let n be the natural mapping from S onto S/R_g. We show that the semigroup S satisfies the condition A.

Let U be an open subset in S. Since g is an open map, $g(U)$ is open in T. Also g is continuous. Hence the subset $g^{-1}[g(U)]$ is open in S. But

$$g^{-1}[g(U)] = \{x \in S \mid g(x) = g(y) \text{ for some } y \in U\}$$

and

$$n^{-1}[n(U)] = \{x \in S \mid g(x) = g(y) \text{ for some } y \in U\}$$

hence $n^{-1}[n(U)] = g^{-1}[g(U)]$ and $n^{-1}[n(U)]$ is open. This shows that S satisfies the condition A.

diameters. The incident mercury light, having a wavelength of $\lambda = 5461$ A°, results in the following data characterizing the five scattering curves:

$\alpha = \frac{2\pi r}{\lambda}$	d	n
1.9	3302 A°	1.2
2.0	3476 A°	1.2
2.1	3650 A°	1.2
2.2	3753 A°	1.2
2.4	4171 A°	1.2

After reducing the experimental readings, these intenities were compared to the theoretical curves and found to agree within an uncertainty of about 2.5%. Thus from the graph the apparently close relation between calculations and experiment can be observed. Hence, the scattering apparatus can be said to operate correctly, and calibration is insured with the help of standard solutions like the one used.

The method of reducing experimental data is described on the following pages.

The second part of the experiment consisted in measuring the increase of scattering effects—as a function of angles—in stagnating water. Highly demineralized water was filled into the scattering cell, which was not covered on top. Measurements were made for ten consecutive days. The result of these observations is plotted on semi-logarithmic paper in Graph 7.

REDUCTION OF DATA

In order to make a comparison between experimental and computed scattering data, a reduction of data is done in four major steps:

1. The actual scattering volume of the illuminated liquid changes for different positions of the phototube.

Graph 4

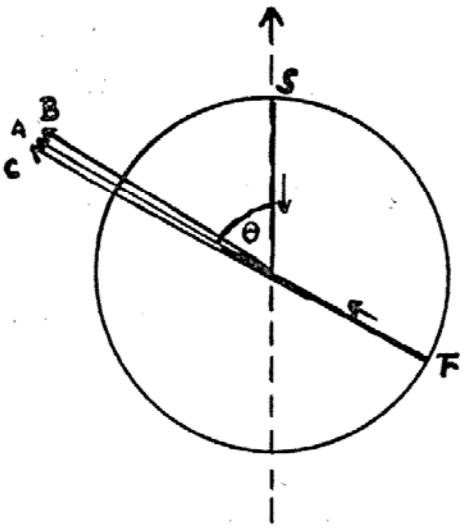
The effective volume is a maximum for $\theta = 0°$ and a minimum for $\theta = 90°$. Therefore, since the effective volume is directly proportional to the scattering intensity:

$$V_{90} = abc \qquad I_1 = I_{90}$$

such that

$$\sin\theta\, V_\theta = abc \qquad I_1 = \sin\theta\, I_\theta$$

2. At every position of the phototube, the intensity measured is actually an addition of three components of scattering:



Graph 5

A. component due to scattering from incident light

B. component due to scattering from beam reflected from cell-point-S

$$B = nI_{(180-\theta)exp}$$

C. component of primary scattering into direction F and reflected at cell-point F

$$C = mI_{(180-\theta)exp}$$

The intensity measured is therefore

$$I_{exp} = A + B + C$$

3. Since the computed data is given per unit intensity, it follows that:

$$\frac{I_{exp}}{I_0} = I_0 + kI_{180-\theta}$$

$$I_0 = \frac{I_{exp}}{I + kI_{180-\theta}}$$

Knowing I_{exp}, I, $I_{180-\theta}$, by functional dependence of the last equation a value of k is found which gives a most constant I_0. k is found to be 0.35.

4. The volume-corrected raw data (I_1) is then divided by constant I_0 and the experimental data per unit intensity is found. The reduction is complete and the comparison can be done. The corrected data is plotted on Graph 6 along with the theoretical data.

Table 1. Stagnating water

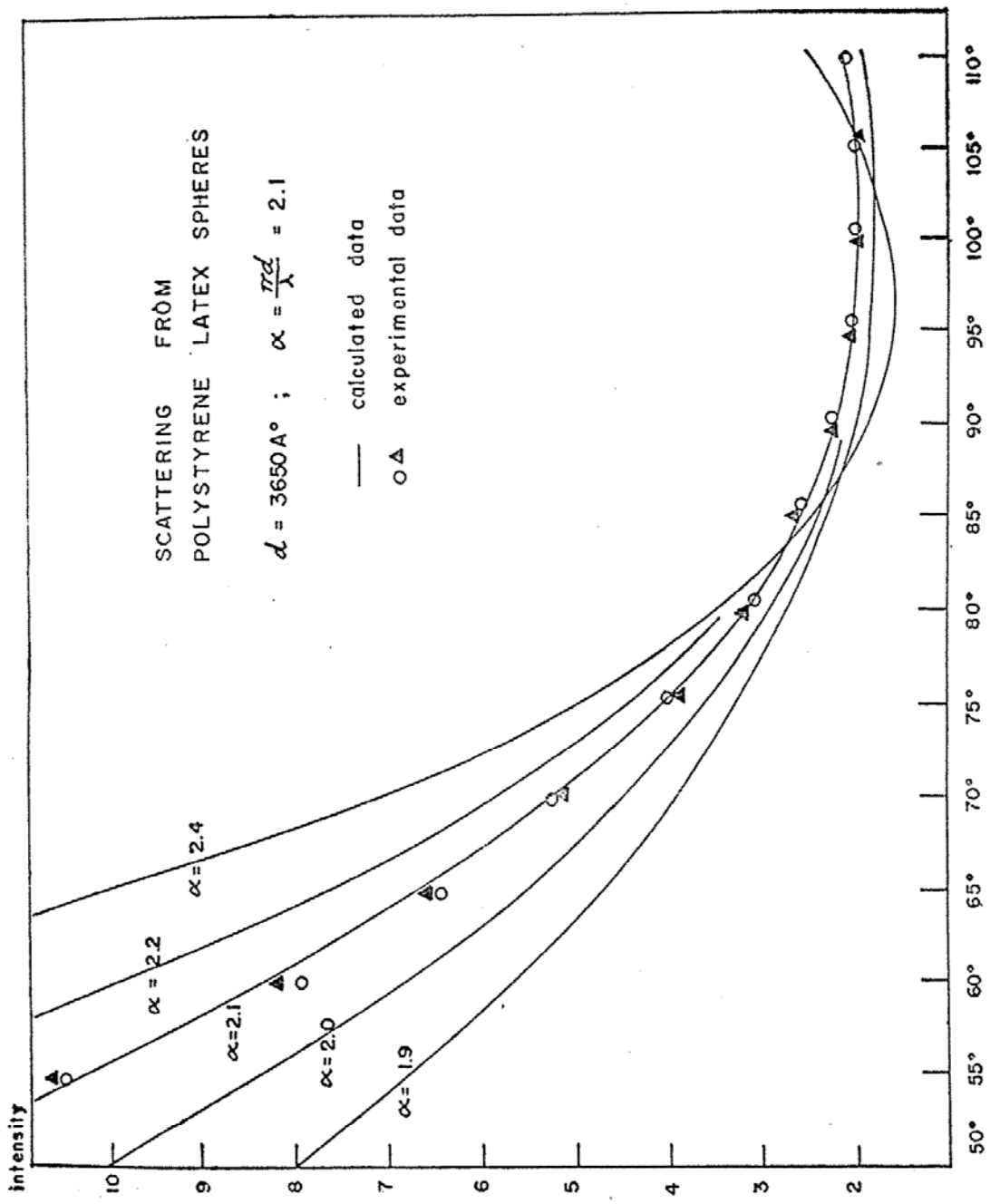
Angle	Days						
	1	2	3	4	5	6	7
100°	64	68	70	71	71	72	73
90°	54	63	64	65	65	66	67
80°	46	49	51	52	53	54	55
70°	45	50	56	57	58	59	60
60°	57	67	74	77	79	81	83
50°	77	103	115	119	120	121	127
45°	109	162	173	175	180	185	190
40°	224	316	339	330	353	353	356
35°	332	519	555	584	584	593	621
30°	436	731	835	935	943	964	972
25°	588	1,149	1,539	1,617	1,696	1,722	1,774
20°	1,265	2,332	3,220	3,553	3,775	3,942	4,053

RESULT AND CONCLUSIONS

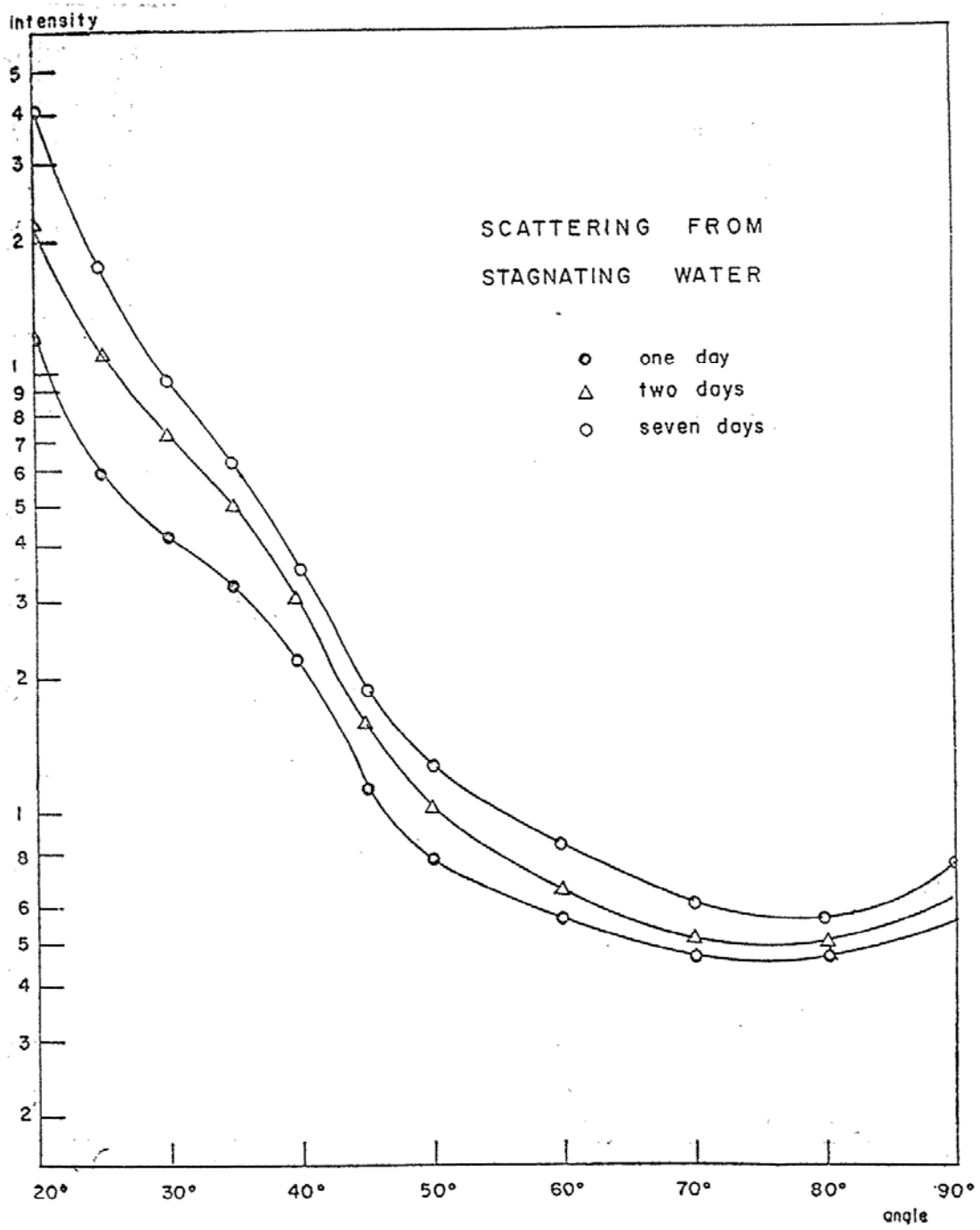
The accuracy and precision of this apparatus for measuring angular scattering was successfully confirmed by both experiments described here. The uncertainty in experiment I of about 2.5% is low in comparison to a difference of 11% and 12.1% with respect to the next following curve of smaller and bigger particles, for which the value of α is 2.0 and 2.2.

Table 2. Polystyrene latex spheres (▲)

Angle	Raw Data	Sine Corrected I_{exp}	Computed Data I_θ	Back-Scattering $I_{180-\theta}$	k $I_{180-\theta}$	I_θ Corrected for backsc. I_c	$\frac{I_{exp}}{I_o}$	$\frac{I_{exp}}{I_c}$	Error
50°	3,134	2,400	1.3008	0.005643	0.001975	1.3027	1,842	1.3782	..
55°	2,370	1,941	1.0530	0.009095	0.0031383	1.0631	1,825	1.1148	4.9 %
60°	1,710	1,481	0.8479	0.01519	0.005316	0.8532	1,736	0.8506	0.3 %
65°	1,263	1,145	0.6682	0.02464	0.008624	0.6768	1,692	0.6577	3.8 %
70°	967	909	0.5188	0.03832	0.013412	0.5322	1,708	0.5221	1.9 %
75°	738	713	0.3970	0.05737	0.02008	0.4171	1,709	0.4095	1.8 %
80°	576	567	0.2967	0.08326	0.02914	0.3288	1,724	0.3296	0.9 %
85°	480	478	0.2230	0.1178	0.04123	0.2642	1,809	0.2745	3.8 %
90°	399	399	0.1635	0.1635	0.05723	0.2209	1,806	0.2291	3·7 %
95°	347	346	0.1178	0.2230	0.07805	0.1958	1,767	0.1987	1.4 %
100°	330	323	0.06326	0.2997	0.10489	0.1881	1,744	0.1883	0.1 %
105°	340	328	0.05737	0.3907	0.13895	0.1963	1,671	0.1883	4.0 %
110°	370	348	0.03832	0.5188	0.17916	0 2175	1,600	0.1999	..
						I_o = 1,741		2.6 %	


SCATTERING FROM
POLYSTYRENE LATEX SPHERES
d = 3650A° ; α = πd/λ = 2.1
calculated data
experimental data
α = 2.4
α = 2.2
α=2.1
α= 2.0
α= 1.9
Intensity
10
9
8
7
6
5
4
3
2
50°
55°
60°
65°
70°
75°
80°
85°
90°
95°
100°
105°
110°

Graph 6


intensity
5
4
3
2
1
9
8
7
6
5
4
3
2
1
8
6
5
4
3
2
SCATTERING FROM
STAGNATING WATER
one day
two days
seven days
20°
30°
40°
50°
60°
70°
80°
90°
angle

Graph 7

Since there is a radial difference of only 51 Angstr. to the next smaller particles, and 93 Angstr. to the next bigger particles, the apparatus could also be used to measure size-differences of spherical particles of this order of magnitude. In addition, the theoretical calculations are valid for a size range of particles from $\alpha = 0.10$ to $\alpha = 40.00$, where α is defined as $2\pi r/\lambda$, and r is the radius of the sphere.

The scattering measurements from stagnating water was at least qualitatively successful, too, since the expected increase of scattering intensity was well detected. The increase was found to be unsteady and inconsistent, both with respect to time and angle. However, there was no decrease of intensity detected at any point of the measurement.

The theoretical treatment of scattering from stagnating water was heretofore known to be impossible, since neither the nature nor the shape nor the index of refraction of the scattering centers can be determined. But the results do give the order of magnitude of the scattering. This result is extremely important for absorption measurements in water solutions.

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光電散射與角度

H. J. HESSELFELD, SVD.

摘　要

應用光電效應做成了一種光學儀器，可以測定液體散射與其角度之間的關係。該儀器能自動非常精密地在每個角度記錄下散射光之强度。

爲保證此儀器之操作與校準，曾將許多大小完全相同的色澤塑膠小球懸浮在純水中用來做標準液體，量出了其每個角度之散射强度，拿來和理論上決定的强度相比較過。

最後才用此儀器去研究暴露在空中之靜水之散射的遞增情形。

TOPOLOGICAL SEMIGROUPS

JOHN B. PAN SJ. 潘壽山

INTRODUCTION

A topological semigroup is a system consisting of a set S, an operation. $(\cdot)$, (we omit this dot and write this operation by juxtaposition), and a topology T, satisfying the following conditions:

1) for any $x, y \in S$, $xy \in S$;

2) for $x, y, z \in S$, $(xy)z = x(yz)$;

3) the operation $(\cdot)$ is continuous in the topology T.

A topological subsemigroup H of a topological semigroup S is a topological subspace of S and also a subsemigroup of S.

An equivalence relation R defined on a semigroup S is called homomorphic if for any $a, b, c, d \in S$, $a\ R\ b$ and $c\ R\ d$ imply $ac\ R\ bd$.

Given an homomorphic equivalence relation R on S, we call the set of equivalence classes mod R the quotient set and we denote it by S/R.

The mapping n from S onto S/R defined by $n(x)$ = the class mod R to which x belongs is called the natural mapping from S onto S/R.

The family U of all subsets U^* of S/R such that $n^{-1}(U^*)$ is open in S is a topology for S/R and is called the the quotient topology for S/R.

We use the term homomorphism to mean continuous homomorphism. In general, we use the terms mapping, function to mean continuous mapping, continuous function.

Let S be a semigroup, R be a homomorphic equivalence relation on S, and let S/R be the quotient set. We define an operation on S/R in the following manner. Suppose that A and B are two arbitrary elements in S/R, then $AB = C$ if for any $a \in A$ and $b \in B$ we have $ab \in C$. This operation is well-defined because R is a homomorphic equivalence relation. Also it is associative, because the semigroup S is associative. Therefore the quotient set S/R with the operation just defined is a semigroup. We call it the quotient semigroup.

We say a semigroup S satisfy the condition A if for every open set U of S, the subset $n^{-1}(n(U))$ is also open, where n is the natural mapping from S onto S/R.

In this paper we shall prove the following theorems:

Theorem 1. If the semigroup S satisfies the condition A, then the quotient set S/R is a topological semigroup with the quotient topology, and the natural mapping n from S onto S/R is an open topological homomorphism.

Theorem 2. If S and T are two semigroups and g is a homomophism from S onto T, then g induces a homomorphic equivalence relation R_g on S.

Theorem 3. Let S and T be two topological semigroups and let g be an open homomophism from S onto T. Then

a) S/R_g is a topological semigroup with the quotient topology;
b) the natural mapping n from S onto S/R_g is an open homomorphism;
c) the mapping h from S/R_g onto T defined by $h(A) = g(a)$ for any $a \in A$ as a subset of S and $A \in S/R_g$ is a topological isomorphism.

Theorem 4. (The First Isomorphism Theorem.) Let S and T be two topological semigroups both satisfying the condition A. Let g be an open homomorphism from S onto T and let R^* be a homomorphic equivalence relation defined on T. Then there is a homomorphic equivalence relation R valid in S and there is a mapping h from S/R onto T/R^* which is a topological isomorphism.

At the end of the paper, we give an example to illustrate the theorems.

THEOREMS

Theorem 1. If the semigroup S satisfies the condition A, then the quotient set S/R is a topological semigroup with the quotient topology, and the natural mapping n from S onto S/R is an open topological homomorphism.

Proof: We have shown that S/R is an abstract semigroup. Now we wish to show that the natural mapping n from S to S/R is an abstract homomorphism. Let X and Y be two equivalence

If a subset $U \times V$ is open in S, then the subset

$$n^{-1}[U \times (0, \infty)] = U \times (0, \infty)$$

is also open in S. Hence S satisfies the condition A.

We show that the natural mapping n from S onto S/R is continuous and open. Let $U \times (0, \infty)$ be an open set in S/R. Then $n^{-1}[U \times (0, \infty)]$ which equals $U \times (0, \infty)$ is open in S. Hence n is continuous. Now let $U \times V$ be an open subset of S. Then $n(U \times V) = U \times (0, \infty)$ is open in S/R according to the observation of the last paragraph. Hence n is an open mapping.

Finally we show that the semigroup operation in S/R is continuous. Let $\{x\} \times (0, \infty)$ and $\{y\} \times (0, \infty)$ be any two elements in S/R such that

$$\{x\} \times (0, \infty) + \{y\} \times (0, \infty) = \{x + y\} \times (0, \infty).$$

Let $W \times (0, \infty)$ be an open neighborhood of $\{x + y\} \times (0, \infty)$. Then since the addition is continuous in the semigroup of positive real numbers, for an open neighborhood W of $x + y$, there are open neighborhoods U of x and V of y such that $U + V \subset W$. Choose $U \times (0, \infty)$ as an open neighborhood of $\{x\} \times (0, \infty)$ and $V \times (0, \infty)$ as an open neighborhood of $\{y\} \times (0, \infty)$. Then

$$U \times (0, \infty) + V \times (0, \infty) = (U + V) \times (0, \infty) \subset W \times (0, \infty).$$

This shows that the semigroup operation in S/R is continuous.

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拓 撲 半 羣

潘 壽 山

摘 要

假設一個點集 S，有運算法（·），當 $a, b \in S$ 時，$a \cdot b \in S$，又當 $a, b, c \in S$ 時，$(a \cdot b) \cdot c = a \cdot (b \cdot c)$，則 S 稱爲半羣。若是這個半羣同時是拓撲空間，而且就此拓撲，半羣運算法（·）是連續的，則 S 稱爲拓撲半羣。

一種同價關係 (Equivalence Relation) 可以把 S 分爲不相連的同價班，(Equivalence Classes)。若是這個同價關係又是同態的 (Homomorphic) 則同價班集合 S/R 也成爲半羣。

自然函數 n 是由 S 到 S/R 的函數：假設 $x \in A$, $A \in S/R$ 則 $n(x) = A$. 如果我們假設 $U \subset S$ 是開集，則 $n(n^{-1}(U))$ 卽是開集，可得下列結果：

1. S/R 是拓撲半羣；
2. 若 S 和 T 都是拓撲半羣，$g: S \to T$ 是開的同態函數 (Open homomorphism) 則 S/R_g 是拓撲半羣，而且：
   a) 自然函數 $n: S \to S/R_g$ 是開的同態函數；
   b) 函數 $h: S/R_g \to T$，其中 $h(A) = g(a)$，是拓撲同構函數 (topological isomorphism)。
3. 若 S 和 T 都是拓撲半羣 $g: S \to T$ 是開的同態函數，又若 R^* 是在 T 上的同態同價關係，則在 S 上有個同態同價關係 R，使得 $S/R \to T/R^*$ 爲同構。

NOTES ON CERTAIN INTEGRAL RELATIONS CONNECTING THE ASSOCIATED LAGUERRE POLYNOMIALS $L_n^{(\alpha)}(t)$ AND $L_n^{(\beta)}(t)$

S. P. CHANG 張壽彭

INTRODUCTION AND SUMMARY

In the course of an investigation on problems related to the photoelectric absorption of x-rays, it often becomes necessary to establish certain integral relations which connect the associated Laguerre Polynomials $L_n^{(\alpha)}(t)$ and $L_n^{(\beta)}(t)$. In this paper we shall present a number of results obtained by an application of the operational calculus which is, generally, best suited for handling polynomials.

We commence with a brief description of the definitions and main theorems of the operational apparatus, in a form which is little more than a collection of formulas, since the formal operational methods are already available in several well-known books.

Operational calculus is based en the following integral:

$$f(p) = p\int_0^\infty e^{-pt}h(t)\ dt \qquad (1)$$

where the function $h(t)$ of the real variable t is continuous on the whole of t-axis with the possible exception of a finite number of infinite discontinuities on any interval of finite length and $h(t) = 0$ for $t<0$. Further, $h(t)$ is integrable on $(0, T)$ for $T>0$, and a number $p_0 \geqslant 0$ exists such that

$$\lim_{T\to\infty}\int_0^T h(t)\ e^{-p_0 t}\ dt$$

exists.

The function $h(t)$ is called the original, and the corresponding function $f(p)$ of the complex variable p its image or operational representation. Following B. V. D. Pol,[1] we write equation (1) symbolically as follows:

$$h(t) \fallingdotseq f(p), \quad f(p) \risingdotseq h(t)$$

or, alternatively,

$$h(t) \fallingdotseq h^*(p)$$

Equation (1) can be considered as an integral equation whose solution is

$$h(t) = \frac{1}{2\pi i}\int_{c-i\infty}^{c+i\infty} e^{pt}\,\frac{f(p)}{p}\,dp \qquad (2)$$

(1) and (2) are fundamental equations of the operational calculus.

It is obvious from (1) that at most one image, if any, belongs to a given original. For a one-to-one correspondence, which is essential for applications, it is necessary that no other original leads to the same image. It can be shown[2] that the definition integral (1) actually establishes a one-to-one correspondence between the original $h(t)$ and the image $f(p)$ within the same domain (or strip, if the definition integral is two-sided, i.e., if the lower limit of the integral (1) is $-\infty$ instead of 0.) of convergence.

Now we shall show that if the definition integral (1) converges for $p = p_0$, then it also converges for all p_0, for which $Rep > Rep_0$. For if we put

$$L(T) = \int_0^T h(t)\ e^{-p_0 t}\ dt,$$

then by the existence and finiteness of $\lim_{T\to\infty} L(T)$ there exists a constant A, such that $|L(T)| < A$, $0 < T < \infty$. Integrating by parts, we have

$$\int_0^T h(t)\ e^{-pt}\ dt = \int_0^T h(t)\ e^{-p_0 t}\ e^{-(p-p_0)t}\ dt$$

$$= e^{-(p-p_0)T}\ L(T) + (p-p_0)\int_0^T L(T)\ e^{-(p-p_0)t}\ dt$$

As $T\to\infty$, $|e^{-(p-p_0)T}\ L(T)| < Ae^{-(Re\,p - Re\,p_0)T}$,
so that the integral

$$\int_0^\infty h(t)\ e^{-(p-p_0)t}\ dt$$

converges; so does the integral (1). It follows therefore that for every original $h(t)$ there exists a $Rep_c > Rep_a$, such that its image converges for all p, for which $Rep > Rep_c$, and diverges for all p,

for which $Rep<Rep_c$. This establishes the domain of convergence of the definition integral.

The image $f(p)$ is therefore a function of the complex variable p defined by the integral (1) in the domain $Rep>Rep_c$. It is not difficult to see that $f(p)$ is in fact a regular function[2,3] in the half plane $Rep>Rep_c$.

It can readily be shown, by direct use of the definition integral (1), that the following fundamental rules hold:

$$h(t) \fallingdotseq f(p) \qquad Rep_c<Rep \qquad (3)$$

$$ch(t) \fallingdotseq cf(p) \qquad Rep_c<Rep \qquad (4)$$

$$\frac{dh(t)}{dt} \fallingdotseq pf(p) \qquad Rep_c<Rep \qquad (5)$$

$$\frac{d^n h(t)}{dt^n} \fallingdotseq p^n f(p) \qquad Rep_c<Rep \qquad (6)$$

$$h(t+\lambda) \fallingdotseq e^{\lambda p} f(p) \qquad Rep_c<Rep \qquad (7)$$

$$\left(t\frac{d}{dt}\right)^n h(t) \fallingdotseq \left(-p\frac{d}{dp}\right)^n f(p) \qquad Rep_c<Rep \qquad (8)$$

$$h_1(t)+h_2(t) \fallingdotseq f_1(p)+f_2(p) \qquad (9)$$

$$\int_0^t h_1(T)\ h_2(t-T)\ dT \fallingdotseq \frac{1}{p} f_1(p)\ f_2(p) \qquad (10)$$

DERIVATION OF THE RESULTS

The associated Laguerre polynomials are defined by the formula

$$(1-x)^{-(\alpha+1)}\ exp\left(\frac{-tx}{1-x}\right) = 1+\sum_{n=1}^{\infty} x^n\ L_n^{(\alpha)}(t),\ |x|<1 \qquad (11)$$

or, in open form,

$$(-1)^n L_n^{(\alpha)}(t) = \sum_{m=0}^{n} (-1)^m \frac{\Gamma(n+\alpha+1)}{m!(n-m)!\,\Gamma(n-m+\alpha+1)} t^{n-m} \qquad (12)$$

They satisfy the following differential equation:

$$t\frac{d^2 L_n^{(\alpha)}(t)}{dt^2} + (1+\alpha-t)\frac{d^2 L_n^{(\alpha)}(t)}{dt} + n\ L_n^{(\alpha)}(t) = 0 \qquad (13)$$

If $\alpha = 0$, the polynomials are simply called Laguerre polynomials and will be denoted by $L_n(t)$.

We introduce a new dependent variable

$$Y = t^{\alpha}\ L_n^{(\alpha)}(t) \qquad (14)$$

whose differential equation is readily obtained from (13) by direct substitution,

$$t\frac{d^2Y}{dt^2} + (1-\alpha-t)\frac{dY}{dt} + (n+\alpha)Y = 0 \tag{15}$$

Applying the fundamental rules (4), (5), (6), (8), (9) to eq. (15), we have

$$-p\frac{d}{dp}(pY^*) + (1-\alpha)pY^* - \left(-p\frac{d}{dp}\right)Y^* + (n+\alpha)Y^* = 0$$

where $Y(t) \fallingdotseq Y^*(p)$

Rearranging gives

$$(p^2-d)\frac{dY^*}{dp} + (\alpha p-n-\alpha)\ Y^* = 0 \tag{16}$$

Its solution is readily seen to be

$$Y^* = C\frac{(p-1)^n}{p^{n+\alpha}}.$$

The integration constant can be determined by use of what is called the limiting theorem of Abel, applied in the following form:

$$\lim_{t\to\infty}\ \Gamma(\mu+1)\frac{h(t)}{t^\mu} = \lim_{p\to 0}\ p^\mu\ f(p).$$

We proceed as follows: From (12), on setting $m=0$ (all lower order terms drop out, since we are going to let $t\to\infty$), we have

$$\lim_{t\to\infty}\frac{t^\alpha\ L_n^{(\alpha)}(t)\ \Gamma(n+\alpha+1)}{t^{n+\alpha}} = C\lim_{p\to 0}\ p^{n+\alpha}\frac{(p-1)^n}{p^{n+\alpha}}$$

i. e.,

$$(-1)^n\lim_{t\to\infty}\frac{\Gamma(n+\alpha+1)}{n!}\ \frac{t^n}{t^n} = C\lim_{p\to 0}\frac{(p-1)^n}{p^{n+\alpha}}\ p^{n+\alpha};$$

therefore

$$C = \frac{\Gamma(n+\alpha+1)}{n!}$$

Hence we find

$$t^\alpha\ L_n^{(\alpha)}(t) \fallingdotseq \frac{\Gamma(n+\alpha+1)}{n!}\ \frac{(p-1)^n}{p^{n+\alpha}}. \tag{17}$$

To obtain the integral relation connecting the polynomials $L_n^{(\alpha)}(t)$ and $L_n^{(\beta)}(t)$, we rewrite the symbolic eq. (17) in the form

$$t^{\alpha}\, L_n^{(\alpha)}(t) \doteqdot \frac{\Gamma(n+\alpha+1)}{n!}\,\frac{1}{p}\,\frac{1}{p^{\alpha-\beta-1}}\,\frac{(p-1)^n}{p^{n+\beta}}$$

The right hand side of the above equation can be written as

$$\frac{\Gamma(n+\alpha+1)}{\Gamma(n+\beta+1)\ \Gamma(\alpha-\beta)}\,\frac{1}{p}\,\frac{\Gamma(n+\beta+1)}{n!}\,\frac{(p-1)^n}{p^{n+\beta}}\,\frac{\Gamma(\alpha-\beta)}{p^{\alpha-\beta-1}}$$

Using the composition rule (10), we immediatly have

$$t^{\alpha}\, L_n^{(\alpha)}(t) = \frac{\Gamma(n+\alpha+1)}{\Gamma(n+\beta+1)\ \Gamma(\alpha-\beta)}\int_0^t (t-T)^{\alpha-\beta-1}\, T^{\beta}\, L_n^{(\beta)}(T)\, dT,$$

since, as can easily be shown,

$$U(t)\ t^{\mu} \doteqdot \frac{\Gamma(\mu+1)}{p^{\mu}} \qquad \text{for } \mu>-1,\ Rep>0$$

where $U(t)$ is the so-called unit function defined by

$$U(t) = \begin{cases} 0, & t<0 \\ 1, & t\geqslant 0 \end{cases}$$

Thus, finally,

$$L_n^{(\alpha)}(t) = \frac{\Gamma(n+\alpha+1)}{\Gamma(n+\beta+1)}\,\frac{1}{\Gamma(\alpha-\beta)}\,t^{-\alpha}\int_0^t (t-T)^{\alpha-\beta-1}\, T^{\beta}\, L_n^{(\beta)}(T)\, dT.$$

This formula, due to Kogbetliantz[4,5] who obtained it algebraically, is of considerable use in studying, inter alia, the asymptotic behaviour of orthogonal polynomials.[6]

Using a similar procedure we find

$$L_n^{(-m)}(t) \doteqdot (-1)^m \frac{(p-1)^{n-m}}{p^n}$$

$$= \frac{(-1)^m}{(m-1)!}\,\frac{1}{p}\,\frac{\Gamma(m)}{p^{m-1}}\,\frac{(p-1)^{n-m}}{p^{n-m}}$$

$$n,\ m = 1,\ 2,\ 3,\ \ldots;\quad n>m.$$

An application of the fundamental rule (10) gives

$$L_n^{(-m)}(t) = \frac{(-1)^m}{(m-1)!}\int_0^t L_{n-m}(T)\ (t-T)^{m-1}\, dT,$$

an essentially new result which is of some use in reducing the physical problem to a simpler form.

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運算微積與拉蓋爾多項式之積分關係式

張 壽 彭

摘 要

本文先就運算微積、拉普拉斯變換之基本概念、定義、定理作一概略說明，再使用拉氏變換導出拉蓋爾多項式間數項積分關係式，此種積分關係式可用以簡化有關愛克斯射線之光電吸收的若干問題。

SAMUEL RICHARDSON AND HIS MODERN CRITICS

JOSEPH DETIG, SVD.

Samuel Richardson is, of course, one of the major authors of the eighteenth century. There has been no period since the writing of *Pamela* (1740) when Richardson was entirely forgotten by the critics, for he has been considered to be the father of the English novel by most of them, and as such has always received their attention. But John Mendenhall says rightly: "Few writers of equal importance have received from later critics such grudging recognition as has Richardson."(1)

That it is so grudging is due partially to Richardson's character. He was a vain, snobbish, small-minded and priggish man. R. R. Brissenden sums up the general feeling:

> ...it is impossible to regard Richardson himself as a great man. That this timid, sanctimonious, prudish business man would somehow have been able to create the sombre and powerful tragedy of *Clarissa* is one of those embarassing paradoxes with which history occassionally presents us. The character of Richardson is an affront to every conception of what the artist should be...(2)

It also seems to bother the critics that he was "an artist by accident and despite himself." We know, from the facts of his life, that he wrote letters for others, even as a young man, and it was through his desire to write a volume of model "letters for all occassions" that he stumbled onto his epistolary novel, *Pamela*.(3)

* * *

Critics claim that Richardson's early success with *Pamela* was a popular rather than a critical one. In their view he expressed perfectly the morality of his own age, and circumscribed it too narrowly with the thinking of his age. People of the rising new middle class wanted to be instructed and entertained according to their bourgeois tastes, and Richardson gave them the right book at the right time. Moreover the instruction, in the eyes of the

modern critics, is materialistic in outlook, and the entertainment, seduction romance, is suspect, coming as it does from the hand of a sanctimonious, pietistic man like Richardson. Such thinking, of course, results in criticism more on "ethical deserts" than on "artistic ability." Its authors are here called the "antipamelists", because of their adverse comments about Richardson's first novel.(4)

The "antipamelists" accuse Richardson and his book of hypocrisy. First of all they say the author himself is hypocritical. Richardson, a confirmed moralist, intended his book as a help and instruction to the young in their moral advancement, and at the same time all this was to be contained in an interesting story. The result, however, is a prurient work. Richardson nevertheless self-righteously maintained obstinately throughout his life that it was a "virtuous book."(5)

According to these critics, there is a two-fold hypocrisy inherent in Pamela's character also. First, there is the combination of her insistently spiritual professions about chastity, and her completely materialistic real view of it, i.e., selling her physical virginity at the highest possible price. The price in this case is marriage to Mr. B., her master. She stays in his house, under the continual fear of being either seduced or raped, and fends off her attacker until he finally marries her, although she is not in love with him, and only wants his name in order to advance herself socially. That morality and repectability thus became interchangeable is an offensive ethic of extreme burgeois Puritanism. Second, throughout her correspondence, there is her habit of praising herself, her appearance, her virtues, especially her class-concious humility and her continual rationalizing about the reason for Mr. B.'s overwhelming attentions towards her. It is particularly annoying because Pamela usually contrives to let someone else say compliments for her.(6)

The "pamelists" in their rejoinders do not bother to defend the character of the author, but proceed directly to the character of the heroine. They hold that Pamela is a well-delineated character because she portrays in herself perfectly a person who "...belongs to a Puritan moral tradition which regards personal inviolability

as the great moral end; ...chastity is for her, symbolic of personal integrity." Furthermore, her inconsistency in action is rooted in her moral nature. Hers, the critics maintain, is a perfect example of one of the chief traits of Richardson's characters, that of the "divided mind." The reader sees a sadly perplexed girl of fifteen who doesn't know exactly what she would do. On the practical level if she leaves her position as servant without her master's consent, she will have no recommendation and be considered a run-away servant. She will also have no chance for marriage without a dowry. The only other choice left will be a dishonest livelihood. Richardson seems to be concerned with the exercise of prudence in order to achieve success through virtue and thus attain salvation in both worlds.(7)

Concerning Pamela's false humility, some of the "pamelists" maintain in direct contradiction to the "antipamelists" that Richardson was capable of irony and satire, and that the whole story of *Pamela* is touchingly funny. Richardson, in their view, satisfied the reader's sense of satire by making fun of Pamela, especially in those passages where she praises herself.(8)

One "pamelist," Simon Lesser, to explain the prurience in the novel, proposes *Pamela* as a Cinderella love story. He claims that incest is inherent in all Cinderella love stories with the Prince Charming as the father image.

> Mr. B. is a kind of father figure not only because of his age and status; he is asscciated in Pamela's mind with the woman whom she served and who was so kind and generous to her that she undoubtedly became a kind of substitute mother. Nor does the incest thread lead only in one direction; it may be conjectured that Mr. B. was attracted to Pamela in part because of her relationship to his mother and that in his unconscious she was in part a daughter or younger sister.(9)

Because of their fundamental stand, both the "pamelists" and the "antipamelists" usually judge *Pamela II*—in fact all that follows the marriage of Pamela and Mr. B.—to be dull, worthless reading. The reason is that the moral dilemma confronting Pamela is resolved by the marriage and the story afterwards is anti-climactic.(10)

Robert Donovan places emphasis on a different aspect of *Pamela* and in so doing defends the second part of the novel,

Pamela II. In his view the real heart of the novel is the problem created by the impact of the new middle class on the aristocracy, and the primary concern then is "...with the social consequences of such an interpretation of classes." After giving numerous examples from the text of the novel to confirm his argument he concludes:

> ...if, as I have been arguing, we read Pamela's dilemma as social in nature, then there is no need to regard the second half of the novel as anti-climactic at all. If Pamela's efforts all along have been directed toward living up to the formal demands of her social position, then her marriage settles nothing, but rather precipitates her into a more difficult and trying position than she has hitherto occupied. She has conquered Mr. B., but the rather more formidable obstacles of public opinions and the objections of the family have still to be dealt with. It seems to me then, that far from flagging, the interest of the novel actually picks up with Pamela's marriage, and I find the scenes with the neighboring gentry, and especially with Mr. B's sister, Lady Davers, among the most clearly focused and skillfully handled in the novel.(11)

In conclusions, it is easy to see that the critics are still divided into two camps. R. P. Utter and G. B. Needham sum up the attitudes and make Pamela the model for heroines in English literature:

> Thus for nearly two hundred years she has been all things to all men: an innocent child, a case for the psychiatrist, a noble woman, a Shavian superman, the glory of her sex, a disgrace to womahood, a saint, a pervert, a martyr, an entirely normal girl.(12)

* * *

Clarissa is considered by the critics to be by far Richardson's most important work and a masterpiece of English prose fiction. Most of the critical appreciations appearing in the last quarter century are elucidations and interpretations of this novel. They mostly are favorable, and that which is negative is concerned by and large with the technical efforts of Richardson's writing, e. g., his prolixity. It is not possible to classify the critics as pro- and contra-*Clarissa* as they were pro- and contra-*Pamela.*

What we can do is classify the interpretations. Dorothy van Ghent has approached this method in her critical appreciation of *Clarissa* under the conception of the novel as various kinds of

myths. She is the first to admit that there is much overlapping material in such a necessary classification, and therefore some repetition. Nevertheless the aspects or myths vary enough among themselves to warrant separate treatment. She arranges the topics under the headings of Puritanism, social caste, problems of family life, and sexuality. And it is under one or more of these topics that *Clarissa* critics interpret the novel—some laying more stress on one aspect than on another.(13)

In general almost all critics agree that Richardson's purpose in writing *Clarissa* was a moral one. This purpose is evident from internal and external evidence. There is no doubt that he fulfilled his purpose, but at some cost to his book. His characters tend sometimes to become "exemplifications of some rather obvious moral lessons, and the themes themselves are irritating—at least for the modern reader—and blatantly moral in character."(14)

Such a purpose is evidently, in the eyes of the critics, Puritan in substance. Puritanism plays a great part in the elucidations of the actions of the principal actors. Lovelace represents, for some critics, the devil, and Clarissa, Eve. The devil tempts Eve, and of course, he does this through sex. Sex is the ultimate evil in the view of Puritanism; therefore, Lovelace wants to ruin Clarissa through the sexual act, and Clarissa's main struggle is to keep herself physically chaste. But it must be stressed, so say the critics, that the chastity here involved is a physical chastity.(15)

The maidenhead represents integrity, and physical violation means a loss of integrity for a Puritan girl, and a victory over her soul. The only way to keep her integrity, even though she has been physically violated, is through the intervention of God. In the end Clarissa is selected for sainthood because of her physical sufferings, and Providence deals out rewards and punishments to all concerned.(16)

Alan Wendt differs somewhat from the above in claiming that Richardson dramatized the sterility of such a Puritanism. *Clarissa* dies without marriage, and even the forced union with Lovelace has been fruitless. They are both sterile—the extremes of two philosophies of life.(17)

Izma Z. Sherwood claims that it was Richardson's artistic sense that made Clarissa die. Norman Robikin confirms this by saying that Clarissa is a great novel with all the implications of tragedy—mainly because there is no earthly way out for the principal characters. Clarissa, with all her "tragic" faults and choices, must destroy herself because the ideal she has set up for herself is not that of the prevailing order.(18)

Some of the other critics agree, however, that although Richardson is certainly the first tragic novelist, *Clarissa* is not so much a tragedy as a "demi-tragedy." Goodness is substituted for greatness as the necessary qualification of the hero and as a result, the catastrophe reveals him, not going down in rebellious defeat, but tamely submitting to the forces which destroy him.(19) Dorothy van Ghent says that the novel is not really a tragedy at all, in so far as

> ...the novel is really a comedy—a "divine comedy"—if we use as the generic distinction between comedy and tragedy the happy and unhappy ending. It has a "happy ending," the good are rewarded, the evil are punished; and it has this ending by virtue of the Puritan world view whose powerful outlines dominate the novel.(20)

Another reading of the novel is under the aspect of the problem of the social caste or the aristocracy versus the rising new bourgeoisie. Lovelace is a member of the aristocracy and by that fact also has a title. Clarissa comes from middle-class parents who have acquired their wealth through shrewd business acumen. Now they want to add nobility to their wealth, a needed sign of respectability for their new-found and sometimes ill-gotten wealth. Clarissa has her virginity—this is the best product of the middle class for trade purposes. Moreover, the burgeoisie at the time is desperately trying to unite the two classes, and the best way to do so is through marriage.(21) The aristocracy, however, is against such a move. Lovelace, taking the part of the aristocracy, wants no such union, but at the same time he wants to humiliate the burgeoisie. This he proposes to do through the rape of Clarissa, who represents it.(22)

Closely allied with the myth or reading of social caste and all its implications is the portrayal of family life and its sanctions in the eighteenth century. Dorothy van Ghent claims that in the description of the Harlowe family with its trials, troubles, sufferings and sinning, we have the world of society in microcosmic proportions.(23) Bruce McCullough brings out the fact that the very sub-title of the novel and the story itself includes the trials and sufferings that can arise from the disobedience of children towards their parents and the results of immoderation and imprudence on the part of parents in the handling of the marriage problems of their children.(24)

Some critics stress the "divided mind" situation that is contained in the family life aspect of the novel. Clarissa is divided between two loyalties that she can never really bring together. On the one hand the eighteenth century code of conduct stressed that parents would never force their children to marry someone against their will. On the other hand children had no right to disobey their parents in the matter of marriage. Richardson gives us the case of an extremely rigid principle and the application of this principle to an individual case with allowance for leeway in either direction. Of course the individual concerned here, Clarissa, is an exceptional person, and her dilemma is an unusual one. But, the authors say, Richardson only wrote about extraordinary people. We need only think of Pamela, the extraordinary servant girl, and Sir Charles, the perfect human being.(25)

In the interplay of associations between the aristocracy and the burgeoisie, and also in the family life portrayal, Norman Rabkin, and others say that convention and instinct have an important role. Clarissa represents a blind passion for decorum and convention. She dies because of her deification of the social law. She puts filial duty before moral right. She forces Lovelace to wait for marriage because this is what is regularly done, although she can foresee the consequences. Lovelace represents man not bound by the rules of society—the animal instinct uncontrolled. In contrast Miss Anna Howe and Lovelace's family, who are all well-balanced and tolerant, represent the happy medium

between the two extremes. Miss Anna Howe, especially, although she is very moral, tries to let herself be guided more by a particular situation than by a rigid dogmatic code that allows no exceptions. The social code nevertheless is binding on all because all actions are performed in public in the novel, and there is no private anguish or private victory. In general, then:

> ...the action of Clarissa is the battle of man between the free forces of instinct born in him, and the decorum which he finds it necessary to construct in order to live with other men, and...one of the purposes of the novel is to find the needed balance in this decorum in which animal nature and external regulation may counter each other. The passions uncontrolled are a great power for evil; on the other hand, regulation without consideration of human nature is completely stifling, leaving no room for life in its arbitrary structure.(26)

Ian Watt introduces another important concept of individualism that critics of Richardson speak of:

> Clarissa...is without allies, and this is fitting since she is the heroic representative of all that is free and positive in the new individualism, and especially of the spiritual independence which was associated with Puritanism: as such she has to combat all the forces that were opposed to realization of the new concept—the aristocracy, the patriarchal family system, and even the economic individualism whose development was so closely connected with that of Puritanism.(27)

Finally, Dorothy van Ghent speaks of the sexual myth in *Clarissa*. This subject is taken up separately by many of the critics, although it is generally treated as an inseparable element of the "Puritan" reading of the novel. They agree that the novel is one of seduction and rape, a typical theme of eighteenth century fiction. It is for this reason that for some the morality of the book is again suspect in that, on the one hand, Clarissa represents an extreme form of Puritanism that desires to be raped, and on the other, the reader is fascinated by the perennial theme of the carnal assault of a virgin.(28)

In speaking about sex, the critics naturally also delve into the psychological tendencies in the novel. There is the long drawn-out rape scene with its hints of voyeurism, and there are the deep, perhaps unconscious, sadistic thoughts and actions of Lovelace

throughout the novel; Clarissa's masochistic love of suffering; and her prudery that forces her at the same time to detest physical sex and to secretly desire it.(29)

* * *

Richardson's last novel, *Sir Charles Grandison*, has received somewhat more critical attention in recent years than in the years preceding 1936. The critics, however, are still unanimous in their adverse criticism of the book. The strongest criticism is that the hero, Sir Charles, is insufferably good and therefore becomes a prig in his relationship with the characters of the novel. Because he can do no wrong, the reader tires of him very quickly. Grandison's figure, the critics conclude, looms upon the reader, not in its true moral perspective, but in exaggeration through a distorting haze of panegyric.(30) Moreover, three of the critics maintain that the book lacks the emotional intensity of a tragedy or drama because we know in advance that the hero cannot fail. All of this is achieved at the expense of realism.(31)

Yet despite its limitations, some modern critics regard the book as Richardson's masterpiece. His technical skill comes to the fore in his narration, description, and characterization, in his imparting to the reader a feeling of intimacy with a group of characters set in the framework of a familiar society. The novel's structure is perfectly planned, although there is a variety of sub-plots. Richardson's use of special predicament as the basis of action makes this novel a model for all comedy of manners, and it "... can fairly be considered the ultimate source of Jane Austen's art."(32)

* * *

No matter how much the critics may agree or disagree with Richardson's moral ideological viewpoint, those, especially historians of the novel, who write about his techniques agree that Richardson made valuable contributions to the beginnings and development of that genre. The basis for all discussion about Richardson as a technician is his epistolary method. Out of this method arises

his mastery in characterization, his "writing to the moment," and his contribution to subsequent novels of sentiment and sensibility. Of course, because he was the first to use many of his techniques, his application of them is naturally somewhat less polished than that of his successors, and even may seem primitive by modern standards.(33)

Richardson began his writing career in the golden age of letter writing, and he used this method to build up a world out of the domestic doings and social commitments of his characters. By selecting a crisis in emotional relations affecting only a few individuals he managed to create in his novels a central plot which unifies the whole(34)

"Writing to the moment", a hallmark of Richardson's epistolary style in some critics' eyes, includes every step in the history of writing letters and how they are carried about, lost, stolen, and perhaps forged. The physical act of writing is not necessarily part of the action, but is "submerged in the action."(35)

Some critics, however, remark that "writing to the moment" can have its absurdities. The characters, who must sometimes guard their pen and ink more closely than their virtue, become victims of Richardson's "epistolmania."(36)

According to most critics, Richardson specialized in vivid characterization. He was one of the first psychologists in the art of novel writing, letting the characters describe themselves in intimate detail and letting them be seen by others in social intercourse. He produced thereby a psychological realism, especially in his portrayal of the "divided mind"—the conflict between a rigid personality and the individual's right to choose a course of action contrary to the principle. Although everyone admits that Richardson has much more proficiency in creating a female character than a male one, still he is a definite precursor of Henry James and even Virginia Woolf, D. H. Lawrence, and James Joyce. There is, however, a difference between the "stream of consciousness" method used by some of these authors (which stresses the privateness of the individual experience and which is therefore appropriate for novels in which the essential loneliness of the individual is por-

trayed), and Richardson's method, which requires "publicity" for all his characters.[37]

Intimately connected with these techniques is Richardson's progress in the art of sentiment. The critics stress that Richardson was definitely sentimental in his writing, but not in the extreme. He had so thoroughly explored all the possibilities of the sentimental epistolary novel that his successors have only produced poor imitations of his original works. Although some of the critics use "sentiment," "sentimental," and "sensibility" interchangeably they usually distinguish Richardson's novels from the French novels of "sensibility", because the French were not trying to instill strict ethical principles, but to produce emotional self-consciousness for its own sake. Richardson, however, created the English "novel of sentiment," which presents a detailed description not only of moral reflection, analysis of motive and circumstance, but also of feeling and emotion, intended to evoke sympathetic emotional reactions in both character and reader.[38]

Because of his detailed writing, Richardson is accused by some critics of prolixity. (*Clarissa*, for instance, is the longest novel in the English language, and the other two are not far behind in length.)[39] Other critics reply that the writers of the eighteenth century wrote at greater length and in greater detail than present day writers. Such length, moreover, did not trouble Richardson's contemporary reading public as it does modern readers. They were more interested in the sentiment than in the story. Realizing this, and at the same time wishing to give more pages to his correspondents, Richardson allowed them to pour out their innermost feelings and emotions. There are no gaps left in the continuity of the narration, cause and effect are analyzed, and "...the slow groping towards action predominates over the action itself."[40]

* * *

In summary we can easily conclude that we still have the pamelists and antipamelists. Some of the "antipamelists" criticism is also still flavored by dislike of the author, Samuel Richardson.

Clarissa is a rich source of material for the sociology and history of the eighteenth century. It has also much to contribute towards the history of ideas, and is used in that way by the critics. *Sir Charles Grandison* is disregarded by many critics because the book is a panegyric of a faultless hero, and therefore lacks emotional intensity. Some critics, however, see the book as a good comedy of manners with social predicament as a basis for action.

On the technical level, Richardson is praised by all for his contributions to the espistolary novel and his advances in vivid characterization.

NOTES

(1) *English Literature*, 1650-1800 (Philadelphia, 1940), p. 798. The statement also applies to criticism since 1940. See James R. Foster, *History of the Pre-Romantic Novel* in England (New York, 1949), pp. 104-105.

(2) *Samuel Richardson* (London, 1958), p. 9. Also see E. L. MacAdam, "A New Letter from Fielding," *Yale Review*, XXXVIII (1948), 300-310; V. S. Pritchette, "Clarissa," *The Living Novel* (New York, 1946), p. 15; Sheridan W. Baker, *Introduction to Pamela*, by Samuel Richardson (Los Angeles, 1954), p. 1. Mr. Baker speaks here mostly of Richardson's desire for praise as author of the work, while nevertheless wishing to be classified only as an anonymous editor of an authentic series of letters.

(3) Brissenden, p. 9; Alan Dugald Mckillop, *Samuel Richardson, Printer and Novelist* (Chapel Hill, 1936) pp. 16-17; David Daiches, "Samuel Richardson," *Literary Essays* (Edinburgh, 1956), pp. 30-32; Bruce McCullough, "The Novel of Sentiment," *Representative English Novelists; Defoe to Conrad* (New York, 1946), pp. 24-25.

(4) Alan Dugald Mckillop, review of *Pamela-Shamela, College English*, XX (1960), 205; _____, "Samuel Richardson," *Early Masters of English Fiction* (Lawrence, 1956), p.60; Brissenden, pp. 12-13. See also Ian Watt, "Love and the Novel: Pamela," *The Rise of the Novel* (Berkeley, 1960), pp. 151-154; Bernard Kreissman, *Pamela-Shamela* (Lincoln, 1960) Mr. Kreissman takes the history of the "antipamelists" up to 1950.

(5) Brissenden, pp. 7-8, 14; Lionel Stevenson, *The English Novel* (Boston, 1960), pp. 82-83; William M. Sale, introduction to *Pamela* (New York, 1958), p. 50; Martin C. Battestin, introduction to *Joseph Andrews and Shamela*, by Henry Fielding (Boston, 1961) p. 16; Morris Golden, *Richardson's Characters* (Ann Arbor, 1963), pp. 1-28. See also Kreissman, p. 83. Mr. Kreissman writes that Pamela was placed on the Catholic Church's *Index* in 1744 most likely because of the book's eroticism although no one is exactly sure why the book was forbidden to be read. But cf Owen Jenkins, "Richardson's *Pamela* and Fielding's "Vile Forgeries", *PQ* XLIV (1965), 200-210. Mr. Jenkins stoutly defends *Pamela* by asking that Richardson be viewed as a moralist on the one hand, and as a good novelist on the other.

(6) Kreissman, pp. 15-16, 42, 44; Allen, p. 33; Arnold Kettle *An Introduction to the English Novel* (London, 1951), Vol. I, 64; Sheridan Baker, Introduction, *Shamela* (Berkeley, 1953), pp. 19, 32; Robert M. Lovett, "The Sex Life of the Unmarried Adult in English Literature," *The Sex Life of the Unmarried Adult*, ed. Ira S. Wile (New York, 1940), pp. 258-259.

(7) John Chalker, "'Virtue Rewarded': The Sexual Theme in Richardson's Pamela," *Literary Half Yearly*, II (July, 1961), 63-64; William M. Sale, introduction to *Pamela*, pp. 11-12; Brissenden, pp. 18-19; R. P. Utter and G. B. Needham, *Pamela's Daughters* (1937), pp. 19-20; Ian Watt, *The Rise of the Novel*, pp. 143-144; B. L. Reid, "Justice to Pamela," *Hudson Review* (1956-1957), 528-531; Robert A Donovan, "The Problem of Pamela, or, Virtue Unrewarded, "*SEL*, III (1963), 377-379; William White, "Richardson: Idealist or Realist?" *MLR*, XXXIV (1939), 241; David Daiches, *Literary Essays*, p. 27. See also William S. Marks, "The Novel as Puritan Romance...," *DA*, XXV (1964), 1214.

(8) Reid, "Justice to Pamela," 517-524; Jenkins, *PQ*, XLIV (1965), 207. But cf George Sherburn, 'The Mid-Century Novel," *A Literary History of England*, ed. Albert Baugh (New York, 1948), p. 952; Kreissman, p. 44; Foster, p. 21. These critics maintain that Richardson was completely humorless and incapable of satire.

(9) "A Note on *Pamela*," *CE*, XIV (1952), 13-17.

(10) Kreissman, p. 10; Daiches, *Literary Essays*, p. 40; Brissenden, p. 17; Stevenson, pp. 84-85.

(11) P. 389. Cf. Jenkins, 205-206.

(12) *Pamela's Daughters*, p. 18.

(13) *The English Novel: Form and Function*, pp. 52-63.

(14) Ian Watt, *The Rise of the Novel*, pp. 212-213.

(15) This same theme is prevalent in *Pamela*. See *supra* p. 7 ff; John A. Dussinger, "Richardson's Clarissa: 'A Work of Tragic Species'" *DA*, XXV (1964), 6689.

(16) Alan Wendt stresses this aspect in "Clarissa's Coffin," *PQ*, XXIX, 418-495. See also Leslie A. Fielder, *Love and Death in the American Novel* (New York, 1960), pp. 39-41; David Daiches, *Literary Essays*, pp. 33-34; Elizabeth Natchgall, *Die "Memoires" der Marguerite de Valois als Quelle zu Samuel Richardson's "Clarissa"* (Bonn, 1960), pp. 33-35; Robert Etheridge Moore, "Dr. Johnson on Fielding and Richardson," *PMLA* LXVI (1951), 166; Stevenson, p. 97. See also Ian Watt, *Rise of the Novel*, pp. 216-219. Watt emphasizes the Puritan preoccupation with death.

(17) "Clarissa's Coffin," 494. Cf. Dorothy van Ghent, p. 54. See also, Elizabeth Drew, "Samuel Richardson: *Clarissa*," *The Novel*...(New York: 1963), p. 52.

(18) Irma Z. Sherwood, "The Novelists as Commentators," *The Age of Johnson: Essays Presented to Chauncey Brewster Tinker* (New Haven, 1949), 120; Rabkin, "Clarissa: A Study of the Nature of Convention," *ELH*, XXIII (1956), 213. For a slightly different approach to the same topic, see John A. Dussinger, "Conscience and the Pattern of Christian Perfection in *Clarissa*," *PMLA*, LXXXI (1966), 236-245.

(19) Kettle, Vol. I. 66; Alan D. Mckillop, *Early Masters of English Literature* (Lawrence, 1956), pp. 76-80; Brissenden, p. 38; R. P. McCutcheon,

Enghteenth Century Literature (London, 1950), pp. 51-52; Stevenson, pp. 95-96. Cf. Walter Allen, p. 39.

(20) *The English Novel: Form and Function*, pp. 55-56. Cf. Fielder, p. 31.

(21) Marriage and the changing economic attitude towards it are the subject of Christopher Hill's essay, "Clarissa Harlowe and Her Times," *Essays in Criticism* (1955), 315-322. See also George Sherburn, introd. *Clarissa* (Boston, 1964), p. 7; Daiches, *Literary Essays*, p. 27; Mckillop, *Early Masters of English Fiction*, p. 67. Cf. Watt, *The Rise of the Novel*, pp. 220-221.

(22) The evolution of Richardson's ideas about the interpenetration of classes is described by William M. Sale, "From *Pamela* to Clarissa," *The Age of Johnson...Tinker.*" pp. 127-138.

(23) PP. 57-58. See also Sale, "*From Pamela to Clarissa*," p. 133.

(24) PP. 30-31; Drew, p. 50-51.

(25) Daiches, *Literary Essays*, pp. 28-29; William M. Sale, introd. *Pamela*, p. 9; Sale "From Pamela to Clarissa," 134-135; Alan D. McKillop, *Samuel Richardson, Printer and Novelist*, pp. 127-128, 134-135; McCullough, p. 36.

(26) Norman Rabkin, "*Clarissa:* A Study of the Nature of Convention" 204-217. See also Daiches, *Literary Essays*, p. 28; Brissenden, pp. 27-28; George Sherburn, introd. *Clarissa*, pp. 7-8. Cf. Golden, *Richardson's Characters*, pp. 44-45; 94. Mr. Golden contends that all of Richardson's main characters in one way or another have the "urge towards dominance". The only way in which they have success in life is to control this urge through decorum and "punctilio"—a very strict social code for women.

(27) *The Rise of the Novel*, p. 222. Morris Golden, in his *Richardson's Characters*, has a chapter entitled "The Individual and Society," pp. 141-181, in which he deals extensively with this problem. Clarissa is the main example used. See also Alan D. McKillop, *Early Masters of English Fiction* (Lawrence, 1956), pp. 67-68; Hill, "Clarissa Harlowe and her Times," 333.

(28) PP. 50, 61-62; Stevenson, p. 100; William M. Sale, "From *Pamela* to *Clarrissa*," 127; V. S. Pritchett, *The Living Novel* (New York, 1964), p. 28.

(29) Frank Kermode, "Richardson and Fielding," *Cambridge Journal*, IV (1950-, 106-114; Golden, pp. 1-28; Ian Watt, "The Naming of Characters in Defoe, Richardson and Fielding," *RES*, XXV (1949), 333-334; W. Allen, Wendt, "Clarissa's Coffin," 487-491.

(30) Stevenson, p. 116; Krutch, p. 165; Boas, pp. 39-40; Daiches, *Literary Essays*, p. 49; Church, p. 73; Allen, pp. 41-42; Neill, p. 58.

(31) Stevenson, p. 116; McCoullough, pp. 28-29; Allen Wendt, "Richardson and Fielding: A Study in the Eighteenth Century Compromise," unpublished Ph. D. Dissertation (University of Michigan Microfilms, 1957), p. 256.

(32) Mckillop, *English Literature from Dryden to Burns*, p. 265; _____, *Early Masters of English Fiction*, pp. 87-92. Cf. Brissenden, p. 32.

(33) Watt, *The Rise of the Novel*, p. 15. Also see June S. Siegler, "Diderot and Richardson: A Confluence of Opposites," *DA*, XXIV (1963), 3758-3759,

(34) Martin S. Day, *History of English Literature*, 1660-1837 (New York, 1963), P. 224; McCullough, pp. 23-24, 34-35; Stevenson, pp. 81-82; McKillop,

English Literature from Dryden to Burns, pp. 263-264; _____, *Early Masters of English Fiction*, pp. 47-56; George Sherburn, "Samuel Richardson's Novels and the Theatre—A Theory Sketched," *PQ* (1962), 325; Charles C. Knight, "*Clarissa:* An Analysis," *DA*, XXV (1964) 2494.

(35) Mckillop, "Epistolary Technique in Richardson's Novels," Rice Institute Pamphlet XXXVIII (April, 1951), 36; George Sherburn, "'Writing to the Moment'," *Restoration and Eighteenth Century Literature: Essays*...Alan Dugald MacKillop (Urbana, 1963), pp. 20; 209; _____, *PQ* (1962), 328-329; ____, introd. to Clarissa, p. 7; Northrop Frye, "Towards Defining an Age of Sensibility," *Eighteenth Century Literature: Modern Essays in Criticism*, ed. James L. Clifford (New York, 1959), pp. 312-313. See also Helen T. Greary, "A Study of Process in the Novels of Samuel Richardson," *DA*, XXIV (1963), 3728-3729.

(36) Battestin, introd. to *Joseph Andrews and Shamela*, p. 12. See also Ian Watt, introd. to *An Apology for the Life of Mrs. Shamela Andrew* by Henry Fielding (Los Angeles, 1956), pp. 9-10.

(37) Allen, pp. 36-37, 43-44; Brissenden, p. 12, 25; Burrell, introd. to *Clarissa*, p. 12; Church pp. 70-71; Sale, introd. to *Pamela*, p. 6. See especially Golden, *Richardson's Characters*, p. 46, *passim;* A. E. Carter, "The Greatest English Novelist," *University of Toronto Quarterly*, 17 (1948), 390-397.

(38) Erik Erametsa, *A Study of the Word "Sentimental" and of other Linguistic Characteristics of Eighteenth Century Sentimentalism in England* (Helsinki, 1951), p. 29; Allen, p. 43; Day, p. 223; Stevenson, p. 121; Watt, *Rise of the Novel*, pp. 174-177; Foster, pp. 104-117 Daiches, *Literary Essays*, pp. 34-35; Walter Wright *Sensiblity in English Prose Fiction, 1860-1814; A Reinterpretation*, Illinois Studies in Language and Literature, Vol. XXII, Nos. 304, pp. 16-17, 23-24; Boas, pp. 11-12.

(39) Stevenson, p. 99; Kreismann, p. 42; Paul Dottin, "Samuel Richardson et le Roman Epistolaire", *RAA*, XII (1936),

(40) A. A. Mendilow, *Time and the Novel* (London, 1952), p. 127; Franz Stanzel, "Innenwelt-ein Darstellungsproblem des englischen Romans," Germanisch-Romanische Monatsschrift, XLIII (1962), 277-279; Robert E. Moore, "Dr. Johnson on Fielding and Richardson," *PLMA* LXVI (1951), 167; Church, p. 74; Allen, pp. 37-38; McKillop, *Samuel Richardson, Printer and Novelist*, p. 126; Fredrick W. Hilles, "The Plan of *Clarissa*," *PQ*, XLV (1966), 236-248; Irwin Gopnik, "Verbal Structure and Richardson's *Clarissa*, *DA*, XXV (1964), 7243; John S. Bullen, "A Search for a Method: The Novels of Samuel Richardson," *DA*, XXV (1964), 1888-1889; ____; *Time and Space in the Novels of Samuel Richardson* (Logan, 1965).

SAMUEL RICHARDSON 和他的近代批評家

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摘　　要

Samuel Richardson 被人尊稱爲英文小說之父，至今他的作品仍深受批評家之重視。但是批評家的鑑賞是十分吝惜的。

有些批評家不喜歡作者的個性，有些不同意他的道德觀點。但是大部份的批評家讚揚他對書信小說的貢獻。他們認爲 S Richardson 是第一流心理小說作家之一，擅長描寫女性性格。他們强調他在其創作中無疑地是富感情的，但並不趨於極端。

部份批評家指責他的作品冗長，在一般英文著作中他的小說是屬於最長的小說。另一方面，讀者們並不挑剔他那冗長而詳盡的描寫。他們對他作品內蘊育的感情比故事本身更感興趣。

批評家認爲 S. R. 的作品是研究18世紀社會學，歷史學觀念很有貢獻的豐富資料。

PEARL BUCK'S LITERARY PORTRAIT OF CHINA AND THE CHINESE

PETER VENNE, SVD.

For almost two thousand years the old Chinese empire has attracted the attention and interest of European writers. As early as the first century of the Christian era Roman authors tell us about the "sericas vestes", the gauze-like silken garments of the rich ladies which provoked the protest of Roman moralists. To the Europeans of the Middle Ages China was a legendary country of vast dimensions and immense riches. Their knowledge was based chiefly on the descriptions given by Marco Polo. With the beginning of the 16th century the reports of the Jesuit missionaries began to shape the European view of China. The high opinion of China which men like Voltaire and Leibniz professed was formed by the very positive picture given by the missionaries in Peking. But side by side with these reports went another current of information: that of the merchants and adventurers who gave a realistic and rather negative picture of the Middle Kingdom. The second part of Daniel Defoe's *Robinson Crusoe* reflects this type of information.

During the 19th century China reached its lowest point in Western evaluation. The earlier enthusiasm for everything Chinese now gave way to a strong feeling of apathy which soon grew into loathing and scorn. It was the century of the Opium War and European Imperialism. More recent expressions of this negative attitude are found in books like R. Gilbert's *What Is Wrong With China* (1926) and R. Townsend's *Ways That Are Dark: The Truth About China* (1934).

A new turn in the history of Western opinion of China was brought about by the First World War. This terrible experience taught the nations of Europe to become sceptical about the superiority of Western culture and to look with a new eye on the old

civilizations of the East. Generally speaking the attitude of modern writers toward China shows a serious endeavor to give an objectively true and fair picture of the country and its people. As compared with former centuries the sources of information are much more reliable. The more outstanding modern authors know China from a long personal experience.(1)

The first place among contemporary authors who have made China the object of fictional or literary writing belongs to Pearl S. Buck. Her books have given to millions of readers of all nations and races the first realistic and understanding picture of this nation, which, in regard to population and history, holds a unique position among the peoples of the world. In sixteen major novels and some collections of short stories published between 1930 and 1957 Pearl Buck gives a comprehensive and detailed picture of Chinese life. As a daughter of missionary parents, born in America in 1892 during her parents' vacation trip, she passed the years of her youth in Chinese surroundings. After finishing college in America she lived again in China in close contact with Chinese life and customs.

Pearl Buck's numerous works dealing with China might well be grouped under the following themes:

a) China at home: *The Good Earth* (1931); *Sons* (1932); *The Mother* (1935); *Pavilion of Women* (1947); *The Bondmaid* (1949).

b) China in conflict with Western civilization: *Eastwind-Westwind* (1930); *The First Wife* (1933); *The Young Revolutionist* (1934); *A House Divided* (1935); *The Exile* (1936); *Fighting Angel* (1937); *Kinfolk* (1950); *Letter from Peking* (1957).

c) The national awakening of China in the war with Japan: *The Patriot* (1939); *Dragon Seed* (1941); *The Promise* (1943); *China Flight* (1943).

In the preface to her collection of short stories *Today And Forever* (1941) the author writes what could well be taken as a preface to the whole of her China novels: "The context of the stories begins with the older Chinese, follows their increasing contact with the new age and leads up to the war with Japan. If I have depicted faithfully what I feel to be the tough, resistant

and indomitable quality of the Chinese people then I have attained my purpose."

To gain access to the strange world which Pearl Buck wants to disclose to the foreign reader it is good to start with the works which center about the second theme, that of the conflict between East and West, and first of all, with her novel *The Exile*. In this book China is depicted as it presents itself to a foreigner, an American, whose view is sympathetic but deeply different from the Chinese view. It is the China of 1890 and of the following decades, the China of the peasants of the Yangtse valley. The "Exile" is the mother of the author, a missionary lady, a woman of a warm and sensitive nature, who suffers under her inherited puritanism which has shaped her life and vocation. It is the story of the hard but finally resigned life of a wife and mother as it could befall a white woman in old China.

A country of strange beauty unfolds itself to the foreign missionary as she travels to the place of her destination: the soft autumn air of the Yangtse valley; the masses of feathery, waving bamboo; the fields yellow with heavy-headed rice; the drowsy rhythm of the flails beating out the grain; then the dark, cool temple halls with the gods standing dreaming and motionless against the walls; the slender pagoda rising lonely on a distant hill:[2]—all this was a strange experience for the American visitor.

But the country also presented other aspects: Swarms of mosquitoes breeding malaria hung over the tepid water of the rice fields; heaps of decaying offal covered with flies lay steaming in the hot sun; while the little bells of the pagoda sounded with a silvery tinkle, a beggar sat at the foot of the wall, his nose and cheeks eaten away with leprosy.[3]

The contrast to her own country was overwhelming: there the rich new land of America; here this "old, old country, crowded with too many suffering people, fetid with too abundant life—life too swiftly born, too quickly dying."[4]

In *The Exile* China is viewed through the eyes of a foreign observer; in *Eastwind-Westwind* China narrates its own story. In the form of a confession, a young Chinese mother tells her foreign

friend how she has experienced the clash between Oriental and Western attitudes and opinions. Her story is a small sector of the major conflict between China and the Western world. But the whole harrowing vehemence and tragedy of the greater event are mirrored in the minor picture. Two worlds are standing in sharp contrast against one another: the old Chinese civilization, conservative and reserved, bent on form and dignity but at the same time full of haughty arrogance and unwillingness to learn; on the other hand, the youthful America where tradition and ceremony count for nothing, action and efficiency for everything, a country which tackles the problems of life without bias or inhibition.

In *Eastwind-Westwind* the opposite attitudes arrive at a final conciliation; in the tale *The First Wife* however, they lead to a tragic dilemma in which only suicide can liberate the dismissed wife.

The stormy unrest of the young revolutionary China (of about 1910) is illustrated in the novel *The Young Revolutionist.* Here we watch Chinese life as it unfolds before the eyes of a young farmer. The peasantry rise before our eyes: simple people who have hardly ever looked beyond the narrow limits of their village, people without school education, tied to their patch of land. But these people live under the heavy shackles of ancient traditions: grovelling fear of despotic gods, a low estimation of women, loveless marriage entered into under the order of their parents—and they suffer all in dull resignation. These deeply rooted habits are going to be changed by the Revolution. But this Revolution which seemed so beautiful in the ideals of the young reformers becomes a gross caricature of itself when put into practice.

For a large international reading public the name of Pearl Buck is associated with the title of her first major novel *The Good Earth.* This book, which was on the best-seller list for 21 months, established the author as a writer. With its two sequels, *Sons* and *A House Divided,* the whole trilogy appeared under the significant title *The House of Earth.*

This great work, teeming with people and events, cuts across the very midst of Chinese life. It is a family novel which begins

in old China, describes the rise of a vigorous clan, and finally ends with the revolutionary present.

Wang Lung, the clan's ancestor, starts out as a poor peasant. All the incidents which may befall the individual or collective life of people in China pass before our eyes. Famines, the hardships of refugees, plunderings, war, banditry, floods are the mile-stones along the road of life. The intervals are filled with monotonous and hard labor. Wang Lung is a man overflowing with vitality and physical energy. Battered about by life, he becomes hardened and reckless. There is in him a certain primitive health which through contact with the "good earth" of his fields always enables him to recover from mental conflicts and physical passions.

Wang Lung eventually becomes a rich man. He buys the big house in which his wife had lived as a bondmaid and lives in it with his sons and grandsons. After his death his sons take over the large estates, sons so different in character from one another that one can hardly believe them to be children of the same father and mother.

The oldest one develops into a man of luxury whose only interest is in good food and sexual debauchery. The strong sensual strain in his father's character becomes dominant in him. The second son, Wang the merchant, embodies the acquisitive sense of his father. He is the typical miser, thrifty for himself and his family, and merciless whenever a good bargain is at stake.

There is still the third son. He becomes a soldier. Dominated by ambition he gathers a troupe of reliable and daring men, sets out for conquests, and eventually establishes his position as an independent warlord. But in his heart broods a strange conflict. As an upstart and soldier he must be hard and ready to kill. Yet in spite of occasional cruelties he remains in his innermost heart a soft man. His inborn sense of justice coupled with his feeling for the cruelly exploited peasantry help him to rise almost to the role of the "noble outlaw" who is such an important figure in Chinese popular literature.[a] His son however, the rough soldier's

(*a*) Cf. the famous old novel *Shui Hu Chuan* 水滸傳, which Pearl Buck translated under the title *All Men Are Brothers.*

only hope, hates military life with all his heart and reveals an outspoken love for the soil. This hereditary strain from his grandfather breaks forth in him with elemental power.

The central character in the third part of the trilogy *A House Divided* is the warlord's son who goes to America as a student. Here we learn how a Chinese sees and experiences a Western country. The American reader watches himself, as it were, through Chinese eyes. Thus he is able to feel how strange the Western way of life must appear to Oriental people. By such a comparison things Chinese appear in a much more sympathetic light. Light and shadow are distributed equally on East and West. Racial prejudices against the Chinese on the part of Western people appear as an expression of a narrow-minded attitude in the same way as does Chinese contempt toward foreigners.

The inner conflicts of the Chinese student abroad are depicted with an "empathy" which is characteristic of Pearl Buck. These conflicts arise from his witnessing the technical superiority and cultural achievements of the West and intrude further upon his mind when he hears the news and opinions on China which are being circulated in America and which cause him, while defending his country, to see it only in its brightest light. But this rosy picture of his native country is cruelly shattered when, on his return home, he watches the backward and unsanitary ways of China with eyes sharpened abroad. This way the author is able to say sharp and unpleasant things concerning China without hurting or offending the people.

Pearl Buck's third theme, the struggle of China against Japan and the great national awakening which this conflict provoked, is unfolded in the novels *The Patriot, Dragon Seed,* and *The Promise.* Here we can also observe the characteristic will of Pearl Buck to understand other nations and races. With a penetrating eye she analyzes the character of the Chinese and the Japanese. She looks critically at their weaknesses but also benevolently emphasizes their noble qualities.

Dragon Seed, the most widely read of this last group, shows China writhing under the strong fist of a military conqueror.

Again a vast panorama of Chinese life is set before our eyes: guerillas, patriotic students, soldiers, prostitutes, traitors, refugees. But in the very midst of the destruction of countless lives and teeming cities children are born. China's strength is in its inexhaustible reproductive capacity.

In her earlier works Pearl Buck was concerned chiefly with the poor peasantry and with the Westernized port cities. In *Pavilion of Women*, returning—with a difference—to the first theme, she tells of a large old-style family of the rich gentry. It is one of her most problem-filled works. The book portrays the perennial plight of a woman of strong and independent personality torn between her desire to live her own life and the self-sacrifice required by her natural vocation as wife and mother.

The central character of the novel, Madame Wu, might well be considered the embodiment of the author's innermost thought and wish. In delineating the physical and mental picture of this woman Pearl Buck reveals her high art of characterization. Stroke by stroke the contours and colors of the portrait become complete; tactfully yet realistically the description penetrates into the subconscious depths of the heart. But the Chinese features of the heroine which are at first clear and distinct become more and more blurred and broadly human as the story progresses and, in the end, Madame Wu becomes a mouthpiece for philosophical reflections which obviously do not belong to her but to the author.

Pearl Buck returns to the problem of the Chinese abroad in *Kinfolk*, a story set in America and telling about the rising Communist movement in post-war China.

The Chinese living in America are split into different groups according to their different attitudes toward their country and people. One of them is represented by the conservative professor who tries to maintain before the American public the superior ideal of traditional Confucian China. Another group is formed by rich emigrants who in the security and comfort of America await a better time for their country. A third and final group is made of those who in spite of the alluring opportunities offered by

America can feel at home only in their own country and consequently devote their whole energy to the service of their people.

The two worlds—the Western and the Chinese—are distinctly opposed in America as well as in China, and each side is convinced of its own superiority and rejects the other. But the best representatives on both sides find a common human basis on which they can cooperate and complement one another. The more genuine sense of a natural life, the author finds, is among the Chinese; and this novel, too, testifies to her belief in the natural vitality of the Chinese people which is strong enough to overcome any crisis from within or without.

In 1949 another book appeared that reverted to the first theme: *The Bondmaid.* This novel praises China's tolerance toward the universally persecuted Jewish people; even this apparently unassimilable race cannot resist the slow and quiet influence of Chinese life. The old Jewish colony in Kaifeng, Honan, has now been completely absorbed by the Chinese population.

Pearl Buck's latest book on China, *Letter from Peking* (1957), is dealing with Communism. The Communist ideology ruins the marriage of an American woman with her Chinese husband who decides to leave America and go to China. But deeply disillusioned by the reality of Communism he tries to escape and is killed.

When we look back on Pearl Buck's enormous literary production on China (which as it grows becomes more repetitious—"I cannot be happy without writing novels", the author says of herself), a rich and motly spectacle is displayed before our eyes. The author has obviously tried to cover all major aspects of Chinese society: the city and the country, the rich and the poor, the past and the present, war and peace.

* * *

Our study has to turn now to the question of how the literary portrait of China drawn by Pearl Buck corresponds to reality.

First we have to say that the author, because of the external facts of her life, was eminently qualified and competent to give a true picture of China. She grew up in a Chinese environment,

learned the language thoroughly, and through her whole life stayed in immediate contact with China. She knew the old China, witnessed the inroads of Western ideas, and lived through revolutions and civil wars in which she escaped death only by a hair's breadth.

> I have had that strange and terrible experience of facing death because of my color. At those times nothing, nothing I might have done could have saved me. I could not hide my race... The only reason I was not killed was because some of the others in that race knew me, under my skin, and risked their lives for me.(5)

In fact her description bears throughout the stamp of personal experience. Although after the publication of her first novels Pearl Buck's portrait of China was attacked by some critics as incorrect, the author was able to refute the charges and to defend her portrayal of Chinese life convincingly. Chinese authors, like Lin Yutang, came to her assistance. The external facts of Chinese life, the talking and behavior of the people, seem truthfully rendered, though it must be kept in mind that China is so big that the description of one region need not always fit that of another province and that the passing of the years has brought about considerable changes.

More difficult is the answer to the question of whether the souls of these men and women, their thinking and feeling, are truthfully depicted and interpreted. There have been people who have said that no American or European could really understand the mind of the Orient. Whether this is true or not in Pearl Buck's case, is up to perceptive Chinese critics to decide. There is no doubt that Pearl Buck brings to her portrayal of Chinese and other characters an extraordinary sensitivity. What she has achieved has been recognized by judges in high places. According to the citation which accompanied the Nobel Prize reward, this great distinction was granted her "for rich and generous epic description of Chinese peasant life and masterpieces of biography." The latter part of this citation refers to *The Exile*, the biography of her mother and to *Fighting Angel*, a portrait of her father. Though these two real persons were Americans, Pearl Buck has also

created remarkable Chinese characters, which the reader will not easily forget—such as Wang Lung, O-Lan, Madame Wu (in *The Pavilion of Women*) and the unnamed mother in the novel *The Mother*. Other characters, it is true, are too sketchily drawn; they tend to be types and lack individuality.(6) Their inner life is not convincingly analysed. Pearl Buck's technique of novel writing, which was influenced by the Chinese novel and story-telling, did not always lend itself well to a deeper probing into the mind and soul of her characters.

Like other writers, Pearl Buck sees of course her characters through the medium of her own mentality which is rather pronounced and which in general she does not attempt to conceal. Not seldom does the reader become suspicious that she put too much of her own feeling and mind into her Chinese characters. Yet in some novels, especially in *The Good Earth*, she has achieved an amazing objectivity, so that a critic remarked that, if the author were unknown, the reader could not detect whether the writer was male or female, a radical or a conservative, a follower of a religious creed or an atheist.(7)

It is Pearl Buck's conviction that no people of an alien race is essentially strange to us—even if some incomprehensible elements remain—and that all men are susceptible to sincere humaneness. This fundamental attitude underlies all her writing and gives a peculiar stamp to her picture of China. It is her belief in the victorious strength of unadulterated nature: a nature of which human life is only a small fraction; a nature which produces new forms in superabundant plenty and variety; which sacrifices without concern thousands of individuals, but always has new ones to take their places; a nature which allots wounds and destruction as well as satisfaction and happiness, and which in the eternal rhythm of generating, growing and dying grants rest and peace to the human beings who live close to her.

As to human life the author finds the highest value in the ideal of a free, natural and tolerant humanity. She applies this yardstick, as it were, to all the characters of her novels. In the Chinese way of life it is above all the Taoistic element of the

national heritage with its calm and understanding humaneness which has her full sympathy. Therefore in her later novels, in which special emphasis is given to moral and philosophical problems, the characters she approves of are endowed with Taoistic traits (as are Madame Wu and Brother Andre in *Pavilion of Women*, and Kung Chen in *The Bondmaid.*) In sharp contrast to them are such Western characters as the Christian missionary lady and the Jewish rabbi in the above mentioned novels, people who in spite of good will and great energy are handicapped by racial, traditional, and chiefly religious bonds.

Basic, unadulterated human nature is also the only common ground on which the various races and nations can meet. Therefore, in Pearl Buck's opinion, it is of chief importance to remove every kind of prejudice or intolerance established by traditions or religious systems. As to China she finds the representatives of the older generation in many cases so stubborn in their age-old preconceptions that it is impossible for them to change. But in the younger generation nature is strong enough to find and to assert herself. That is Pearl Buck's hope and belief for the people of China.

In all this she does not simply embrace a romantic opinion of the goodness of human nature. She is not blind to actual deficiencies and cruelties in human life. In *Dragon Seed* and *The Promise* she draws a realistic picture of war, this strange phenomenon in human history—of timeless war with the victor's brutality and the helpless suffering of the defeated. But it is characteristic of the author that in spite of her sympathy for the oppressed she she is never carried away into a generalizing animosity toward any nation. In her eyes war is an extremely complex experience for a people, and a foreign observer cannot lightly take sides with approval or condemnation.

Pearl Buck finds an eminent value in the service to one's fellow man as a companion in life and destiny. It is the great positive value of human solidarity. The social merit of her writing rests on this deep insight. This philanthropic view of the world has also given to her picture of China its general sympathetic tone.

In all her novels the author's warm interest in the Chinese people is so outspoken that, obviously, they must be a genuine expression of an irresistible impulse to open and to interpret to the Western peoples this Chinese world which had been locked off and misunderstood for so long.

A major topic in Pearl Buck's writing is the missionary problem. Although she came herself from a missionary family, she shows in her work an outspoken reserve concerning the religious ideals of her parents. In the novels *Fighting Angel* and *The Exile* she tells the story of her father, a man uncompromisingly dedicated to his vocation. In spite of the many amiable features which she depicts in his character, it is altogether a rather unattractive picture which she draws—in all filial piety, but also out of a different religious attitude. Because, as she put it, he had given everything to God, he had nothing left for his wife and children.(*b*)

Her disapproval of her father's religious attitude seems to be due chiefly to her conviction that the rights of human nature, which are so sacred to her, were too much neglected in his religion.

In the story of her own life *My Several Worlds* she writes that she had inherited part of the missionary impulse from her parents, not in the direction of preaching the Christian gospel but of helping the suffering. "I have never been an evangelical missionary ...yet I know very well that my missionary beginnings have shaped me to the extent of feeling responsible at least for what I can personally do about a given situation which needs mending." (.p 371) In an article written in 1933 she stresses the importance of a humanitarian faith, but without dogma. She is in favor of a religion which emphasizes universal brotherhood and the practice of justice, kindness and tolerance. "I am always in love with great ends," she once wrote. "This comment", says P. A. Doyle in his perceptive and thorough study of Pearl Buck, "is the best revelation she has given us of her mind and soul. It is the key to her nature."(8)

(*b*) In her autobiography *My Several Worlds* (1954) she sees her father over the distance of more than twenty years in a brighter and more sympathetic light.

* * *

The books of Pearl Buck owe much of their popular appeal to their easy and pleasant readability. Her style is of a quiet calmness, interwoven with stereotyped expressions and favorite words (especially in *The Good Earth* and *Sons*). The tale unfolds slowly and cautiously like the speaking and thinking of the peasants she describes. With her womanly gift of observation she gives a carefully detailed picture of a milieu which speaks to all the senses of the reader. Qualifying attributes are given with great moderation. Thus every word retains its full value. Every thought finds expression in a new sentence.

> Wang Lung lay lying. He lay dying in his small, dark, old earthen house in the midst of his fields, in the room where he had slept as a young man, upon the very bed where he had lain on his marriage night. The room was less even than one of the kitchens in that great town house, which was also his, where his sons and their sons now lived. But he was content to die here in the midst of his lands, in this old house of his fathers, in this room with its crude, unpainted table and benches, under his blue cotton bed-curtains, since die he must.
>
> For Wang Lung knew that his time had come to die, and he looked at his two sons who were beside him and he knew they waited for him to die and his hour was come. They had hired good physicians to come from the town, and these came with their needles and their herbs and they felt his pulse long and looked at his tongue, but in the end they gathered their medicines together to depart and they said: "His age is on him and none can avert his destined death." (*Sons*. p. 1)

By this calm one-after-the other progression in the presentation of thought and phrases her style seems to participate in the timeless life-rhythm of old China; but as an American critic observes, it became "increasingly inappropriate to the representation of the Chinese life of today."[9] Rather often, also, she seems to be carried away by her desire to put into her stories as many details of Chinese life as possible. This may be in the interest of the foreign reader, but is doing harm to her art of writing. In her Nobel Prize lecture Pearl Buck refers to the influence which the popular Chinese novel had on her own creative writing. It seems quite possible that the Chinese language, which has no

relative construction and operates more with parallelisms than with the subordinating devices of the Western languages, has considerably shaped the structure of her English style.

* * *

If in conclusion we try to determine the place of Pearl Buck in modern American literature, we have to record that the critics in general are not inclined to rank her among the foremost masters of the novel. They feel that in the later period of her creative life she became more interested in humanitarian preoccupations than in cultivating her literary art; they regret that from her earlier objectivity she later turned to didacticism. Some critics also cannot forgive her that in her writing she disregards such modern devices as myth and archetype, stream-of-consciousness and symbolism, and that in an age which favors pessimism she firmly believes in progress and the basic goodness of man.(10)

On the other side stand the facts that Pearl Buck has achieved an amazing popularity all over the world. Her books are translated into all important languages. Together with Mark Twain she holds the first place among the most popular American writers abroad. Of her voluminous literary production at least her Nobel Prize books *The Good Earth*, *The Exile* and *Fighting Angel* can well stand the comparison with major American works. But it would seem that the lasting significance of Pearl Buck lies in her untiring campaign for the dignity of every human being and in the fact that it was she who first brought to the Western nations a realistic knowledge and understanding of a people which will be one of the leading powers of the modern world.

NOTES

(1) For a more detailed study cf. Peter Venne, *China und die Chinesen in der Neueren Englischen und Amerikanischen Literatur*, (Zurich 1951).
(2) *The Exile*, passim.
(3) *The Exile*, p. 101.
(4) Ibid. p. 151.
(5) Preface to *The First Wife*. See also the touching account in *My Several Worlds*, pp. 206-216.

(6) Cf. P. A. Doyle, *Pearl S. Buck*, (Twayne Publ. 1965); p. 44.
(7) Cf. Doyle, Op. cit. p. 45.
(8) Op. cit. p. 155.
(9) Fr. Millett, *Contemporary American Authors*, (Harcourt, Brace, N. Y. 1944). p. 70.
(10) Cf. Doyle, op. cit. 151, 154.

Works by Pearl S. Buck dealing with China.

Eastwind-Westwind	1930
The Good Earth	1931
Sons	1932
The First Wife and Other Stories	1933
All Men Are Brothers (Translation of a Chinese novel)	1933
The Young Revolutionist	1934
A House Divided	1935
The Mother	1935
The Exile	1936
Fighting Angel	1937
The Chinese Novel (Nobel Prize Lecture)	1939
The Patriot	1939
Dragon Seed	1941
Today and Forever (Short Stories)	1941
The Promise	1943
Chinaflight	1943
Pavilion of Women	1947
The Bondmaid	1949
Kinfolk	1950
My Several Worlds (Autobiography)	1954
Letter from Peking	1957
A Bridge for Passing (Autobiography)	1961

描寫中國和中國人民的作家—賽珍珠

PETER VENNE, SVD.

摘　　要

在16本小說及一些短篇創作集內，賽珍珠呈現對中國眞實而友善的描述。這個題目中對每一本小說有簡明的分析然而所要討論的問題是這些小說是否是對中國的眞正圖解。

賽珍珠作品題材的長處短處也簡潔地討論到。她的重要性是她爲了每個人的尊嚴作繼續不斷的努力，同時她也是第一位帶給西方國家有關中國的眞實見聞和解釋。

WOMAN AS SYMBOL IN THE NOVELS OF GERTRUD VON LE FORT

SR. LAETIFERA COLET SSpS.

Westphalian Baroness Gertrud von Le Fort (born 1876), a poet and novelist who is at the same time a trained historian and philosopher of no mean stature, is one of the outstanding figures of contemporary German literature. Her works have been evaluated by *Herder Correspondence* as "so far the most meaningful and perhaps the only German contribution to the great Catholic literary renascence of our century." Recipient of the Gottfried Keller Prize, the Annette von Droste Poetry Prize, the University of Munich honorary degree of Doctor of Theology, and other similar awards, Le Fort has likewise begun to claim the attention of critics outside Germany. Paul Claudel gave enthusiastic praise to Le Fort's volume of poetry, *Hymns to the Church*, describing them as "great lines of tremendous power and majesity." George Bernanos adapted one of Le Fort's novels, *The Song at the Scaffold*, into a play which he called *The Fearless Heart*. America, too, has begun to take notice of her. At the Catholic Renascence Society Symposium in 1951, F. O'Malley of Notre Dame University classified Le Fort among our great contemporary poets in his lecture: "The Renascence of Poetry: From Hopkins To Le Fort." The same has been expressed by John Devlin, writing on "The French Influence on Gertrud von Le Fort" in the *Renascence Critical Journal*, "Le Fort should be considered one of the greater contemporary poets and masters of poetic prose."

Most of Le Fort's poems are in three volumes: *Hymns to the Church* (1924), *Hymns to Germany* (1932), and *Poems*. Her most significant novels are *The Veil of Veronica* (1928), *The Wreath of the Angels* (1946), *The Song at the Scaffold* (1931), and *The Wedding of Magdeburg* (1938). Her most popular book, however, is the prose treatise, *The Eternal Woman* (1934).

Mystery is a challenge. The lurking awareness of a reality beyond reality confronts man at every frontier of his existence. But man is a paradox. He holds on, almost desperately, to the security of the known and the knowable, even while an incomprehensible feeling for the transcendent draws him to a completely 'other' dimension of reality which is reached only through a brave leap into the depths of mystery.

The poet-novelist Gertrud von Le Fort throws such a challenge when she confronts her readers with a visible world shot through and through with the invisible, in which the core of human existence is seen as man's encounter with God's will incarnated in the drama of human life, and in which man's fulfillment or frustration is in direct proportion to his capacity to fulfill this divine will. In Le Fort's vision the capacity to surrender to the divine will—or what she designates "the religious quality"—is symbolized in woman. "Surrender as a metaphysical mystery, surrender as a mystery of Redemption is the mystery of woman."(1)

The present essay is concerned with this essence of the womanly as mystery embodied in the women characters of Le Fort's novels. It is not a critical analysis but an interpretation, drawing largely from the author's most widely read book, *The Eternal Woman,* and two of her novels, *The Veil of Veronica* (The Roman Fountain) and *The Wreath of the Angels.*

Le Fort's Symbolism

The world of Le Fort is a transparent world in which everything has the force of a symbol. Persons, places, events, and actions are never just themselves; they are at the same time revelations of higher realities. Expanding realms of meaning are seen lying beyond visible things, and at the same time perceived as a concealed presence inside them.

The symbolic outlook, that is, the perception of a deeper reality embodied in a visible thing, is based on the assumption that reality has a symbolic structure in which everything is referred beyond itself. As Hermann Melville puts it, "... some certain significance lurks in all things."(2) Le Fort sees the symbol as a visible reality "through which ultimate metaphysical realities or modes of being are apprehended not in an abstract manner but by way of a likeness." Since the symbolic character of a thing lies in its nature, its symbolism remains even when its actual, visible characteristics may at a given time be contrary to the reality it signifies. The lily, taken as a symbol of purity, remains so even when we see it lying in the mud. Similarly, if women is taken as the

symbol of the religious quality of surrender, her symbolic character remains even when she is selfish and egoistic, although in this as as in the previous example, the symbol takes on a different overtone.

The Woman-Symbol

Le Fort's woman-symbol points to a fusion of two realities: the eternal and the womanly. By *the eteral* she refers not merely to the timeless and the absolute but more specifically to the infinite dimensions of the mind and will of God. *Womanly* is her term for the essence of the feminine mode of being, which, to her, is the power to surrender. Put up against the background of the other, the power-to-surrender as oriented toward the will of God constitutes what Le Fort calls "the cosmic-metaphysical image of woman." This image is not the sum total of the unchanging traits of woman, but rather, womanliness as a mystery—the mystery of surrender—which in its temporal, existential reality we call the *religious quality*.

The capacity to surrender is not exclusive to woman, but it is proper to her. It is her significance, the primordial force of her being.

> According to her very being and her innermost meaning, woman is not only destined to surrender but constitutes the very power of surrender that is in the cosmos.

In Le Fort's mind whatever surrenders in creation has a feminine dimension or springs from the feminine principle. For while the manly power is self-assertion, the womanly power is surrender.

Le Fort's choice of the term *surrender* is significant. The more positive words, devotion or self-giving, or the more negative ones, resignation or submission, are by-passed as lacking the peculiar dimension of her concept—the dimension of paradox. Surrender is at once a yielding and a conquest, weakness and power, annihilation and creativity, anonymity and openness, captivity and freedom, death and life. The term rings with the totality of fulfillment that comes from the ability to lay down one's own self in an

attitude of openness, acceptance, and union. It is the gift of one's being.

What is the self that woman surrenders? By its very closeness to nature and the secrets of life, woman's being is inclined to spiritual and vital values. Her primordial desire to bear and to protect life draws her into intimate contact with eternity where life begins, ends, and is immortalized. Paul Claudel expresses the same idea when he identifies woman's true self as that which understands God and shares with Him the patience and power of creation.(3)

Being rooted in this primordial intimacy with the eternal, woman has a capacity to give fully without losing herself, because the more she gives herself, the more her being is realized. Her nature, as Paul Claudel sees it, is indeed to give and be given away.(4) Le Fort expresses it this way, "Wherever woman is most profoundly herself, she is not as herself but as surrendered." In this constant influx of being from her to another she creates a natural refuge—a womb—in which others can develop themselves.

Woman as the bearer of life is the receptive vessel out of whose openness leaps creation. A person becomes creative when, opening up fully and entering into the intuitiveness of reality, he surrenders to the force of inspiration that transports him beyond himself. Hence, creativity in all forms is a dimension of the feminine; it is the fruitfulness of surrender. "The hour preceding all creation is not called our power but our helplessness, which is the only omnipotence."

In the spiritual life, surrender is redemptive, and that is why we can call woman in some sense the bearer of salvation.

> In the humble *Fiat* of her answer to the angel lies the mystery of Redemption in so far as it depends on the creature. For his redemption man has nothing to contribute to God other than the readiness of unconditional surrender. The passive acceptance inherent in woman, which ancient philosophy regarded as purely negative, appears in the Christian order as the positively decisive factor.

Surrender also means freedom. The will which constantly strives for the good is truly free when it can desire, accept, and

attain not only what is apparently good but what is really good, without error, always. Since the highest good is found in the will of God, submission to this will is perfect freedom. When woman, therefore, acts according to her symbolic character, she is free and holy. Holiness and freedom are equated to perfect womanliness, as Leon Bloy succinctly puts it, "The holier a woman is, the more she is a woman."

Woman, as the embodiment of this surrender which is a cleaving to the highest good and a participation in omnipotence, becomes a source of tremendous power, but a power concealed in the spiritual. "Man regarded in his comic aspect stands in the foreground of strength, while woman dwells in its deeper reaches." Is it any wonder that the hand that rocks the cradle rules the world and that it is the Woman who has crushed the serpent's head? However, woman can also fall away from her symbolic character, and that is a serious thing, for it implies rebellion. In Le Fort's mind, every fall, even the fall of Adam and Eve, since it is an act of disobedience to the divine will, is consummated within the sphere that has in a special sense been entrusted to woman. When a human being falls, it is because he refuses to surrender.

Therefore, as long as woman is true to her symbolic character, as long as creation retains its womanly aspect, there is creativeness in every area of life. But when the contrary happens, the refusal to surrender will lead to unfruitfulness and death. The apocalyptic figure of the whore, as the woman who has completely abandoned her symbolic character, is the symbol of the corruption that will bring about the last judgement.

> The whore signifies the radical destruction of the *Fiat* when surrender gives place to that last form of refusal which is prostitution. ... She no longer serves in the capacity of one who cooperates in the spirit of humility and love. She serves but as a thing, and the thing avenges itself through domination. Over the man who has fallen under the domination of dark passions, she rises triumphantly, the enslaver of his passions. The whore as utter unfruitfulness is the image of death.

In opposition to the whore there is another apocalyptic figure—the total woman, Mary, symbol of the new heaven and the new

earth. The metaphysical mystery of woman achieves perfect realization in one who has united into her one life the three great modes of feminine existence: that of the virgin, the bride, and the mother.

In each of the modes of feminine existence the mystery of surrender is revealed through different symbolic forms. The virgin, a veiled figure, symbolizes the anonymity of surrender.

> Like the solitary flower of the mountains, far up at the fringe of eternal snows, that has never been looked upon by the eye of man; like the unapproachable beauty of the poles and the deserts of the earth that remain forever useless for the service and the purposes of man, the virgin proclaims that the creature has significance, but only as a glow from the eternal radiance of the Creator.

In the bride surrender takes the form of revelation of being. The bride is a mirror to man, revealing to him not only the other half of existence but also its divine dimension. The womanly half of existence refers to the particular vision of life presented by the womanly spirit, which man can never reach unless it is revealed to him by woman. Hence, man's perception of the wholeness of reality, which marks his greatest thought and art, is dependent on the cooperation of the womanly.

> On the spiritual plane with which we are concerned, it is not a question of taking up a man's thoughts through the mediacy of a woman, nor of a spiritual cooperation and joint development.....It does not mean, furthermore, merely an understanding accord on the part of the woman: this would be only like a musical accompaniment. But here surrender is a revelation; it is a gift. The woman, having surrendered herself to the man under whatever form, brings to him the dowry of half a world. In the surrender of the woman as the revelation of this other hemisphere consists her participation in man's cultural creation.

Woman is the bride of man's spirit not only in the realm of social and cultural life but also in the supernatural, because she turns his eyes to God. Le Fort's classic example in this regard is Dante: "Beatrice's eyes were turned to God, and mine were turned to her."

The image of the woman surrendered in motherhood is the image of the earth endlessly giving life. The elemental mother nature in every woman is the most forceful expression of her surrender. Its fulfillment in the birth of a child is but the first breaking forth of something much more universal. To be a mother means not only to have a child but to embrace all the helpless, small, weak, and suffering things of the earth. The truly surrendered woman must of necessity become a mother. The more spiritual her motherhood is, the more translucent she is as symbol of surrender to God's will.

The Symbol in the Novels

The theme of surrender surges like a mighty hymn in the novels of Gertrud von Le Fort. Sometimes with the crescendo of a grand passion, sometimes with the pianissimo of mute suffering, it sweeps the characters into gripping conflicts of which the inevitable crux is acceptance or rejection of a human order charged with the divine. With dramatic power and evocative language, Le Fort lays bare a unique dimension of human life:

> Seeming defeat ending in conquest, supreme sacrifice in triumph, crucifixion in resurrection—against the backdrop of historic scenes this appears as the fruit of all human experience if we but tremble in the strength of Christ.

The human experience that she speaks of is love—but a love which is triumphant only in surrender. This brings us face to face with the mystery of woman.

The women of Le Fort's novels are triumphant, not because they surmount their conflicts, or carve their own destinies, or overcome trials by force or resistance, but because they embrace them, and by embracing them prove themselves equal to life. For them, life is a mystery to be lived, not an adventure in self-determination. Their strength is one made perfect in weakness; their peculiar triumph, one rising out of the ruins of seeming defeat. Something in their vision of reality and in the totality of their surrender to it stamps their words and actions with a kind of finality that is not merely their own but is universal. It

is as if they were saying, 'So be it with me; so is it in world upon world beyond me.' Though they walk the stages of history, their garments are timeless, their actions hide and reveal layers of significance. They wear a layered countenance; they bear the identity of a universe within their own.

This kaleidoscopic wealth of meaning is most evident in Veronica, the heroine of Le Fort's two-part novel, *The Veil of Veronica.* The surface story in itself is rich in implications; but the more one penetrates its symbolism, the wider grows the expanse of meaning. In the encounter of Enzio and Veronica, for instance, one perceives a progressive deepening of conflicts:— the revolt of inner refusal versus the obedience of self-surrender; security and risk as opposing approaches to spiritual engagement with fellowmen; the struggle of two powers: the power of unbelief to de-personalize men, and the power of faith to bring forth the "I" out of the full communion of the "we"; the spearhead of a deified state and a pure race splintering against the impalpable wall of the kingdom of the Mystical Body; the primordial clash of darkness and light.

A detailed analysis of the symbolism is not possible in this essay. Only such aspects of it will be touched upon as are necessary to clarify the character of the woman-symbol in Veronica. The choice of Veronica as subject for analysis is based on the fact that in her the symbolism strikes the depths of the situation "towards which our world is being driven: a catastrophe conditioned by the denial of man's humanity to such a point that in a spiritual-ethical sense he no longer exists." The vital problem of modern unbelief is set forth in a way quite disturbing to the spiritually complacent: "The majority of men can no longer be converted but only saved through the vicarious atonement of love."

Veronica's Story: A Summary

The Veil of Veronica is composed of two volumes: *The Roman Fountain* and *The Wreath of the Angels.* The setting moves from Rome just before the outbreak of the first World War to Germany at the onset of the Nazi movement. An orphan in the care of her grandmother, sixteen year old Veronica meets Enzio, a young

intellectual and a highly-gifted poet. He finds in her, whom he calls Spiegelchen (little mirror), a wonderful complement to his own person. But a gulf separates their spirits. Veronica's intuitive faith heightens Enzio's unbelief—what he calls his "feeling of exile, metaphysical loneliness." But she tells him, "If I have something you have not got, it belongs to you, too." As Enzio leaves for the war, she realizes that there is something deeper than just human love in her involvement with Enzio. There is a call, gentle and haunting, like the soft murmur of the Roman fountain under her window. This call gradually becomes clearer to her after she is baptized into the Catholic Church. She sees it as a mission to radiate her inner light to those who have no grace.

When her grandmother dies, Veronica is called by her guardian to Germany. There she meets a changed Enzio, bitter from the "betrayal" of Germany in the war and obsessed by an overriding ambition for the resurgence of the glorious German Reich. Whereas he used to be terrified by his metaphysical loneliness, now he finds security and strength in his unbelief and in his strange credo: One can do all that one wills. Veronica realizes that the image in her soul no longer stands between them and that Enzio has wilfully lost himself in a "land without grace." Yet she finds that his very godlessness has irrevocably united him to her. Enzio, on the other hand, is torn between his passion for her and his hatred of her religiousness. In order to destroy her illusion that God has called her for him so that her life of grace would also be his, he says:

> Yes, there is a relation between me and your piety, but it is totally different from what you think. When you knelt for the first time before Christ at St. Peter's, I also resisted him for the first time. Before this I was indifferent to him; I hardly thought of him; I considered him a failure. But when I saw you kneel before him, I recognized that he was dangerous[5].

As his rejection of her religious world takes on a progressively harder cast until there is no hold left for Veronica's human tenderness, her love is driven deeper and deeper into its inner reality. A strange fidelity keeps her at his side: her certainty that Christ

loves Enzio precisely because he is so far away from Him. Is his godlessness then to separate her from him? As Veronica's conscience struggles for clarity and decision, her spiritual security slips like melting ice from under her feet—

> ... all certainties have become questionable, as if they were whirling right around and turning into their opposite, so that what finally appears to be the saving situation is the losing one.

The awful certainty dawns on her that Christ must once more walk a "land without grace"—Enzio's—but only in her. Is this what the haunting murmur of her fountain has been telling her all the time? When she finally utters her Yes, a moment's eclipse renders her fountain dry and her inner light darkness. In the days that follow, prayer becomes impossible; she is plunged into an abyss where she partakes of another communion, that of Enzio's spirit. At one point in the desperation she tries to go to her confessor to take back this resolve that she had confided in him, but she is held back by a power not her own. Like Enzio, she was no longer master of her own will; she was taken at her word.

Enzio, feeling his triumph a threat to himself, becomes more and more engulfed by the demonic will that has possessed him. He provokes the final catastrophe that comes about through Starossow. Wrested away from the Catholic faith by Enzio's designs for the Reich, Starossow has in a secret, depairing way looked upon Veronica's spirituality as "the only meaning that still is." But after Veronica's resolve to share Enzio's world is consummated spiritually, Starossow sees with horror what Enzio has done. In despair he kills himself. To prevent Veronica from calling a priest, Enzio locks the three of them in the room until Starossow is dead. Veronica's defeat is complete; she breaks down. While the doctors struggle hopelessly for her life, something suddenly collapses in Enzio. He suffers a passion like the crumbling of a hard crust around a terrible emptiness, until he is reduced to nothing but a desperate hope that Veronica might live. After weeks of crisis between life and death, Veronica is given the last

recourse—the sacrament of extreme unction. Contrary to all expections, she begins to recover. When Enzio is finally allowed to see her, he falls on his knees for the first time, and his words come stumbling like a confession:

> I know that you will forgive me ... but only through that love which I have so passionately hated. Now it has become my only hope ... I have destroyed all other loves.

Speechless and deeply touched, Veronica looks at the two angels with a wreath at the foot of her bed. The inscription has become an actuality: "We are not single; we are Love."

Womanliness as Mystery in Veronica's Nature

Through a powerfully effective play of light and darkness Le Fort portrays in Enzio and Veronica the mighty conflict between grace and godlessness, and the paradox of Christian defeat. While Veronica's symbolism strikes us with a powerful impact, her real, womanly personality commands our interest just as strongly. She is flesh and blood, yet translucent—a dynamic reality in which symbol and significance merge and find expression in her womanly characteristics. A closer look at her character shows how her natural traits flow from a strong basic disposition of self-surrender. The most outstanding of these traits are her intuitiveness of approach, the absoluteness of her self-giving, and her intensity of presence.

Intuitiveness of Approach: Veronica's intuitiveness is symbolized in her name Spiegelchen (little mirror), which she acquires as a result of her

> ... uncanny gift of divining what was going on in the minds of those around me, without being able to give myself any clear reasons for my knowledge. It was not a question of reflection or observation, but merely that in some obscure way I seemed to live in my soul the mental processes of others[6].

In the words of Enzio, she knows things

> ... not as others know them, to whom they must be told and explained; but as the birds know their path through the air and the clouds their direction through the heavens,

This keen intuition gives her a visioned feeling for the sacramentality of nature, and a clarity of conviction regarding her relationships with others and the will of God. The finality of her oneness with Enzio, for instance, is something she is definitely certain about but cannot account for. And so it is with the response God is asking of her:

> It lay in my inmost self without my being quite able to apprehend it. It was as though the great joy I had lately been carrying in my heart were forever asking me gently and full of loves: are you able also to bear sorrow?

It is this knowing-at-a-glance that first endears Veronica to Enzio. In the tender scene at the Campagna when Veronica stands between him and the city below, as if to shield him from the engulfing reality of its poetry, Enzio is struck dumb by her intuition of what he could not even express himself. Finally, he exclaims in wonder, "Now you are almost like myself!" The dumb forces in his soul find fullness of being and utterance in her presence. By just being her intuitive self, Veronica reveals to Enzio the wholeness of his world. And out of the revelation are born his greatest poems.

The mirror symbolism of her intuitiveness, carried out by effective little scenes throughout the two novels, such as the mirror scenes in the poetry readings of Enzio, portrays Veronica as a true bridal figure. The bride is a mirror to man not only of his world but also of the divine. This latter aspect of her symbolism provokes the conflict of the second book, *The Wreath of the Angels*, in which the Christian meaning of Veronica's name, as the image of the suffering Christ, attains a stark reality confronting the characters like a sword of decision.

In Veronica's intuitiveness we see surrender as a mode of apprehension which does not proceed from outer fact to inner reality, but is born out of the influx of one's inner reality to that of the other, in such a way that the resulting knowledge seems to arise from both. This is brought out very strongly in the way Veronica understands her guardian's scholarly lectures at the uni-

versity. Even without the necessary academic preparation, she follows his stream of thought with unparalleled closeness, because "I felt so close to his spirit that it seemed to me sometimes as if my guardian drew his ideas out of my own soul."

Absoluteness of Self-giving: When Veronica gives, she gives all; when she accepts, she accepts all the consequences of her surrender. Her love for her grandmother, for instance, is so total in its child's fashion that she finds it an infidelity not to love anything her grandmother loves. Seeing in this quality the beginnings of a great woman, her grandmother advises Veronica on her deathbed: "My child, whatever path you choose, go the whole way."

Veronica indeed goes the whole way to the very end, to the last dare of surrendered love. Obedient to the inspiration of grace, she follows her faith into the arms of the Church. She then decides to give her response to God's love in its fullest and deepest sense, thinking at first that it means her vocation to the religious life. When the call to that response is made clearer in her involvement with Enzio, she follows it to its last consequences, even to a mystical death. With her there are no half-measures, as her governess Jeanette so wisely observes, "You find it simply impossible not to give yourself fully."

This absolute quality of self-giving is one of the most outstanding traits of woman. "She gives herself more simply and perhaps more irrevocably in committing herself more thoroughly and totally."

Intensity of Presence: This is the key to Veronica's character as symbol. This essay uses the term *intensity of presence* to mean the strong drive towards participation in the being of others by a full presence to them, the facility of entering into the inner selves of others.

As a child, Veronica reveals this quality in her experiences of "losing myself." She is easily led out of herself by strong impressions, like Enzio's poetic inspirations. Her Aunt Edelgart worries about her:

> It seems to me sometimes as if Veronica could only find herself in something that lies outside of her being; almost as if she had no existence in herself at all.

Jeanette, on the other hand, finds in it no cause for worry, but rather sees with deeper insight the promise of real fulfillment.

> Jeanette remarked that she did not find that so very terrible, since ultimately we were not created for ourselves. What mattered was to whom or to what we surrendered ourselves.

Veronica's self-analysis confirms Jeanette's opinion:

> Was I really, as Aunt Edel said, just the prey of my tempestuous feelings of the moment? Was I a thing of nought, tossed hither and thither like the whirling sand outside? Was it my doom to be in life the nothingness that others became in death? I was nothing in myself—that I felt. I could BE only in so far as I loved; then I had being, I found myself, I knew myself.

With the blossoming of Veronica's womanhood, this 'slipping-away' grows into a deep capacity for being one with other people, of feeling not only with them but in them. She compares herself to a watch whose beat is at the same time the measure of another's heart. Thus in a unique, lived way, she encounters others in their deepest selves. This quality of being fully there in the other person comes to the aid of her love by enabling her to enter Enzio's inner world, even his "land without grace." The experience of their night—walk through Rome, which symbolizes the mystical agony she later suffers, is a gripping example.

> All I know is that this night I passed through the middle of Enzio's Rome, through the middle of his world, through the middle of his poetry. ... I do not quite know how to describe it, but it was as if I rapidly,—though not always with a pursuant consciousness of the fact—lost sight of myself completely, and became overpowered by a visioned prospect which was not that of my own eyes but that of my companion's, and to which the throbbing pressure of his hand was leading me away, as through the open portals of his soul.

This losing, which is at the same time a finding, of self draws Veronica into a union so close that there is no longer any *mine* or *yours*. Her intensity of presence creates intensity of union, as Enzio once remarks, "With you, one must achieve union with your

deepest self." This explains why she takes the inscription on the twin angels so symbolically: "We are not single; we are Love." Surrender is thus shown as the realization of the "I" through becoming a "we." "Wherever woman is most truly herself, she is not as herself but as surrendered."

Veronica's Surrender as Obedience and Freedom

Le Fort gives a poetic touch to the nature of surrender in the fountain imagery. The fountain is the symbol of the call in Veronica's heart. The fascination of its mysterious murmur awakens in her a longing to respond to the mystery it conceals. This expectancy, this waiting to respond, is the womanly mode of being. It is fulfilled in the utterance of "Let it be done to me." Surrender is thus at bottom an expression of obedience.

Veronica's surrender is also the outflow of her freedom, for one can give nothing away of which one is not free master. The freedom that initiates and consummates Veronica's surrender runs through a basic disposition of hers which Enzio describes in these words:

> ... you spring through almost every hoop that one holds out to you. I once told you at the Thermae of Carcacalla that you are a little bird; you do not spring with your feet, but you fly—you fly with your heart; and this heart of yours is the great difference between us.

Unhampered by the considerations of a hesitant rationality or the conventions of a timid self-security, she flies to the heart of decisions with a sureness of aim that dares the stake of the "last absolute."

Veronica's Surrender as Power in Powerlessness

The power of the novel rests on the paradox of Veronica's symbolism, which one understands only through a dizzying look into the depths of full human encounter and communion. She embodies the human powerlessness of faith when it encounters godlessness. This powerlessness, this defeat is nevertheless an absolute necessity if the nature of faith and its real power is to be revealed. Veronica's surrender is that of Christ in agony on the cross—the Christ who,

> ... even though knowing himself personally bound to the Father in love from the depths of his human heart, was nevertheless living in utter truth, through to the very end, the experience of the estrangement from God belonging to our sinfulness, identifying himself with everything there was, is, or will be of sin-spawned alienation from God in this world. He had to pass through the helplessness of this alienation from God to receive the glory the Father would give him(7).

Here again, love is triumphant only in surrender, as Christ's love triumphs just when it is overcome. When this love comes face to face with the self-deifying materialism embodied in Enzio, two opposing loyalties get interlocked in their desire for union: one surrendered to the affirmation of God's saving will, the other to a demonic denial of it. The conflict that ensues is not a conflict of opposing tensions, but rather, a powerful influx of incompatible worlds.

If we trace the course of this strange encounter of light and darkness, we take as point of departure Veronica's moment of insight, namely when she realizes that God desires her to love Him also with suffering, and that Enzio and she belonged to each other in an inexplicable but irrevocable way:

> I was no longer anxious about the religious opposition between us; for me, this very opposition was itself religious. That we belonged to each other so deeply, without any doubt, beyond any reason, indeed against all reason—this meant precisely that it could only have been ordained by God.

The clarity of this double intuition sets the stage.

The first scene is suffused with light. When Veronica steps into Enzio's life, she believes that her mission would be accomplished by "taking my soul in my hands like a small light, that he might believe in his." Enzio, apprehensively sensing this asks her in spite of himself, "Is it to be a light to me that you have come?" However, his will to blind himself to the reality of her inner life stifles what still remains of that part of him which is by nature spiritually oriented. The only spiritual reality he is willing to recognize in her is that she is the embodiment of his dream of the Reich.

The light starts to dim in the second scene; a gloomy threat looms up in the horizon. Veronica begins to renounce, to lay aside even her trust in her spiritual strength, because she sees that what she is capable of is not enough. She puts her entire confidence now in the sacrament of marriage, by which a man and a woman can dispense grace through their love for one another. Through her union with Enzio, God's grace will at least be able to reach him.

> Marriage then is the sacrament that even the unbeliever can receive, the only one and the last! It is the one great possibility of grace for all those who we know are excluded from our graces.

But the darkness thickens as Enzio rejects the sacrament; he wants to have nothing of the reality it stands for. Veronica answers with a further renunciation, this time of her longing for him. She breaks their engagement, promising nevertheless to remain faithful to him.

In the third scene the storm breaks. Enzio must have her. He resorts to the appeal of flesh and blood. Realizing, however, that it is of no use, he works on his mother's illness to break Veronica's resistance. Veronica now feels how all her human love for Enzio, all her tenderness and natural affection are painfully rooted out of her. She is face to face, not with the man she has loved, but with a power of will that was no longer human.

In view of the step Veronica eventually takes, it is important to pause here and take in the terrible consistency of surrender. If Veronica is to embody surrender to the divine will, she must also suffer all the rejection and hatred that this will suffers from humanity.

Veronica's human love dies a quick death before Enzio's hatred. But her religious self sees in him the deep need of the soul estranged from God. "Enzio had become for me the epitome of the whole unredeemed but passionately loved world." Is she to leave him because he is godless? To have Christ living in her—does this not mean sharing the lot of the sinner, dying the death of his sin? If there is in her union with him a danger to her own religious

security, is the risking of this danger not precisely the condition of that last absoluteness of love which Christ is asking of her, the ultimate point of abandonment to his pure grace?

Racked in the agony of decision, with these questions racing through her mind, Veronica's courage begins to fail. With horror she looks down the abyss over which she hangs on a mere thread—the invisible thread of faith. But just at this time she receives a letter from her confessor in Rome:

> Your fiance's opposition to the demands of the Church with regard to your marriage corresponds perfectly to the attitude of the modern world, which has changed from mere indifference to Christ to an open hatred of him. There are two ways of facing this hatred: the first is to break away from the godless in order to protect one's own soul, the second is to persevere at his side in faith and love. ... The latter way is fraught with the danger of succumbing—but it is exactly this danger which is its great and last pledge of victory. Is defeat not after all a Christian danger? Let us not forget that Christ conquered only from the other side of death and the grave, and that it was just this which was the price of his triumph! ... Be true to the unbeliever. Do not forsake him in his darkness. Through your love for him, be his last link to the Almighty.

Veronica, shaken to her depths, takes the letter as a confirmation. She leaps. And it is night—with the darkness of Good Friday. Impelled by a reality beyond herself—the mystery of love on a cross—Veronica throws her whole being into the abyss of God's will. And the leap plunges her straight into Enzio's world. All the emptiness of spirit, the uncertainty of self, the helplessness of unbelief, the hardness of hate in that 'land without grace' break in upon her soul in waves of despair.

> The treasures of my whole inner life suddenly lost all value. My faith became one immense helplessness, a nameless desolation. ... In my nightmares I saw myself like a lifeless form floating among ruins .... and the horror of it was that in these wanderings I never saw men, or if I did, they looked like a dark, conglomerated mass moved here and there by an invisible will. It was a hell that one did not go down into, but that rose up out of one's own self ... There were no longer any men on earth, only ultimate desolation.

In the end Veronica no longer sees Enzio, only *mysterium iniquitatis*. Nevertheless she perseveres at his side as *mysterium caritatis*. In

her this love seems to be succumbing once more to the malice of man, because "it wills to suffer for the sins of the world till the end of time." But as with Christ the total abandonment to God's will and the outpouring of love to the last possibility of self-emptying brought down the graces of Redemption, so with Veronica grace triumphs through defeat. In her resurrection, Enzio, too, rises to a new life.

The Author's Vision in Veronica

In the story of Veronica, Le Fort presents the problem of modern unbelief by throwing the two approaches—that of breaking away for the sake of security and that of risking danger for the sake of union—down on the table, so to speak. She does not seek to resolve the issue, but she does succeed in bringing it to a head by the radical move of wedging the mystery of woman right into the horns of the dilemma. With this the viewpoint shifts from that of man working out his salvation to that of "spiritual reality looking toward mankind."[8] The saving element is then seen to be not man's sacrifice but his obedience. God's will is operative in the universe and only in full surrender to it do men find themselves and each other. For this divine will is nothing else but the one, eternal, and all-conquering love of God.

* * * * *

Le Fort's woman symbolism comes like an arresting light and a steadying hand. In the mad whirl of materialistic and egoistic concerns that engage a confused generation, Le Fort tells woman to stop and look into herself, into the womanly nature that God has given her—Be what you are: a symbol. It is the face of the spiritual woman—womanliness as mystery—that the world must see again in order to know itself.

> The profound consolation that woman can give to mankind today is her faith in the immeasurable efficacy of forces that are hidden, the unshakeable certainty that not only a visible but also an invisible pillar supports the world. When all the earthly potencies shall have exhausted themselves in vain, and this in the present distress of the world is nearly the case, then even for a humanity largely grown godless, the

hour of the other world will strike again. But the divine creative power will break forth from heaven to renew the face of the earth, only if the earth itself responds again with the religious force, with the readiness of 'Be it done to me!' The hour of God's help is always mankind's religious hour, the hour of the woman, the hour of the creature's cooperation with the Creator. God grant that woman may not miss her approaching hour! On the agitating way between heaven and hell along which humanity is traveling today, the same guides to whom Dante long ago entrusted himself are needed. The poet and seer unfolds all the abysses and steps of purgation in the world of being; but he finds the way to Paradise only when he meets the loving woman whose eyes rest in God'[9].

NOTES

(1) Gertrud von Le Fort, *The Eternal Woman*, trans. M. C. Buehrle (Milwaukee: The Bruce Publishing Company, 1954), p. 6. Subsequent quotations, unless annotated otherwise, are from this book.

(2) Hermann Melville, *Moby Dick*, quoted in in Charles Feidelson, *Symbolism and American Literature* (Chicago: University of Chicago Press, 1953), p. 32.

(3) Claudel, quoted in John Fitzsimons, *Woman Today* (London: Sheed & Ward, 1952), p. 180.

(4) Claudel, *The Tidings Brought to Mary*, p. 44.

(5) Le Fort, *Der Kranz der Engel*....Erzaehlende Schriften (Muenchen: Ehrenwirth Verlag, 1956), p. 348. The quotations that follow, unless annotated otherwise, are from this book.

(6) Le Fort, *The Veil of Veronica*, trans. M. C. Bonacina (London: Sheed & Ward, 1936), p. 3.

(7) E. Schillebeeckx, *Christ the Sacrament of Encounter with God* (London: Sheed & Ward, 1963), p. 31.

(8) John Devlin, "The French Influence on Gertrud von Le Fort," *Renascence: A Critical Journal of Letters*, VII, No. 2, 63.

(9) Le Fort, *The Eternal Woman*, p. 67.

Gertrud Von Le Fort 小說中以女性爲象徵的意義

SR. LAETIFERA COLET SSPS.

摘　　要

這篇散文是研究 Gertrud Von Le Fort 的小說中，女姓究竟象徵什麼。Le Fort 是個德國詩人小說家，雖然在英語天地中不甚有名，可是却在現今德國詩文界他佔有領導的地位。

此文專論有關其作品天使的花環一書中女主角 Veronica 的個性所表達出女性的奧秘。根據作者 Le Fort，女性的偉大之處在於她欣賞宇宙的想像力，有犧牲的能力，尤其對於自我犧牲和上主的意旨。

Le Fort 的小說世界是個透明的世界，裏面一切都有象徵性，以劇性的力量，啓發性的語言，Le Fort 表示出女性角色犧牲的，矛盾的性質及在無能中而隱藏著力量，在失敗中而達於勝利，在棄捨中而得到成功。以 Veronica 爲例，一個狂熱的納粹青年的自我崇拜和一個富有直接觀力並有宗教信仰的青年女子對此青年基於信仰產生的矛盾就是這種象徵的一例。

這篇戀愛小說是在納粹未當政之前，以德國知識份子爲背景，並且自始至終充滿象徵性。强烈的光明和黑暗的衝突襯托出兩種文化和兩個人生觀的衝突，愛情的合一力能够犧牲自己直到失敗與死亡而得到最後的勝利。

本小說出版後掀起很大的爭論，它能深深地透視現代文化及其象徵現代文化之深度加上它那美妙的文句使它能絢爛的生色是該書最直接的吸引力。

STRUCTURE AND DICTION OF WORDSWORTH'S POETRY

P. E. DEMERS, SJ.

Wordsworth was a meditative poet. A sensitive reader of his poetry will often be reminded of the hermits and monks of ancient times whose lives were a continuous introspective meditation based on a careful study of the word of God found in the Bible. They reflected upon themselves and human life in general until they gained some new insight into the meaning of their own existence.

Wordsworth's mind seems to have proceeded in the same way, but with this difference that Nature was his Gospel. Nature was the Word of God. He would read Nature as the old ontemplative monks read the Bible, reflecting upon it and upon himself until he attained some new intuitive knowledge of the World and Man. Close observation of Nature, reflection, and insight seem to be the three constant phases of his thought.

The discursive quality of Wordsworth's thinking is reflected in the basic sentence-structure of his poems. In a chapter of *The Major English Romantic Poets*, Josephine Miles states: "the normal structure of statement for Wordsworth early and late (was)—the inter-connection of particular declarative statement and of phrasal and clausal series with a framing general declaration or exclamation and, especially in later years, an accompanying invocation."(1)

Miss Miles chooses one of the Duddon sonnets as an illustration of this pattern of thought and expression, but it appears more clearly still in "The Small Celandine,"(2) the twenty-four line poem he wrote in 1804. The first two stanzas state a few observations concerning the lesser celandine:

There is a Flower, the lesser Celandine,
That shrinks, like many more, from cold and rain;
And, the first moment that the sun may shine,
Bright as the sun himself, 'tis out again!

Detailed observation continues in the next two stanzas. The poet's eye and mind are riveted to the object itself, although, in the actual writing of the poem, only those traits in the object are reported that will contribute to the total effect the poet wishes to create.

The fourth and fifth stanzas express the observer's intimate reflections:

I stopped and said with inly-muttered voice,
"It doth not love the shower, nor seek the cold:
This neither is its courage nor its choice,
But its necessity in being cold.

"The sunshine may not cheer it, nor the dew;
It cannot help itself in its decay;
.....

The reflective thoughts extend for a few more lines. The last stanza contains the final exclamation:

O man, that from thy fair and shining youth
Age might but take the things Youth needed not!

"I wandered lonely as a cloud," "The old Cumberland Beggar," and some of the sonnets clearly reflect the same simple three steps of Wordsworth's meditation.

In most of the poems, however, the basic structure presents itself in various arrangements. In the "Ode to Duty," it is the exclamation that opens the poem:

Stern Daughter of the Voice of God,
O Duty!

Follows a meditative and introspective observation of the contrasting effects on man of the sense of duty and chance desires. In the end, the opening exclamation is changed into an invocation:

Give unto me, made lowly and wise,
The spirit of self-sacrifice;
The confidence of reason give;
And in the light of truth thy Bondman let me live!

In the most unified and compressed poems, the sonnets for instance, the exclamation runs through the whole verse, or simply frames it, or becomes the very substance of the poem. The fifth Duddon sonnet offers a good example of the last type of exclamation:

Sole listener, Duddon! to the breeze that played
With thy clear voice, I caught the fitful sound
Wafted o'er moss and craggy mound—

In this poem, the responses of observation and reflection are absorbed in the pervading exclamation of wonder.

When Wordsworth separates these three phases of his thought and writes discursive poems, he then falls easily into the faults that Coleridge noted in his *Biographia Literaria.* In this kind of poems are found passages of purely objective description that fit uneasily in the poetry and caused that inconsistency of style and that matter-of-factness for which Wordsworth was criticized.(3) The first instance Coleridge quotes to support his criticism is a passage taken from an early version of "The Blind Highland Boy:"

And one, the rarest, was a shell,
Which he, poor child, has studied well:
The shell of a green turtle, thin
And hollow; you might sit therein,
It was so wide, and deep.

Again, in the first version of "The Thorn," we find a measurement couplet:

I've measured it from side to side;
'Tis three feet long, and two feet wide.

The early version of "Resolution and Independence" also contains passages of similar prosaic style. The transitional and connecting lines of *The Prelude* suffer from the same defect: "sudden and unprepared transitions from line and sentence of

peculiar felicity to a style, not only unimpassioned but undistinguished."[4] We might quote the following passage from Book III of *The Prelude* as an illustration of what Coleridge had in mind when he wrote such criticism of his former friend:

> .....I could behold
> The antechapel where the statue stood
> Of Newton with his prism and silent face,
> The marble index of a mind for ever
> Voyaging through strange seas of Thought, alone.
>
> Of college labours, of the lecturer's room
> All studded round, as thick as chairs could stand,
> With loyal students, ...
> .....
> Let Others that know more speak as they know.[5]

Coleridge notes again further on: "It must be some strong motive ... which could induce me to describe in a number of verses what a draughtsman could present to the eye with incomparable greater satisfaction by half a dozen strokes of his pencil, or the painter with as many touches of his brush." For Wordsworth, the strong motive was no doubt his desire to establish an objective setting for the free play of his emotional responses to Nature and attain an insight into it that could be completely trusted. Without this firm stand on solid external nature his highest flights of Imagination would have been suspected of being the effects of dream or wishful thinking. A mind as turbulently emotional as that of Wordsworth could maintain its sanity only through a strict adherence to external reality. Coleridge who, out of fear for the prosaic, did not scrupulously adhere to the real, got lost in Xanadu.

The fact, however, remains that Wordsworth's poetry is at its best in those passages where his observation of external reality is mingled with a reflective emotional response. Coleridge speaks then of "a perfect appropriateness of the words to the meaning," of purity of language, of a *curiosa felicitas* of diction.[6] He quotes the description of the Sea Loch from "The Blind Highland Boy" and almost the whole of "Ruth" as shining instances of that

curiosa felicitas where observation, Imagination, and Fancy work together in perfect harmony. In such passages, Coleridge is charmed especially by the "perfect truths of nature in his (Wordsworth's) images and descriptions, as taken immediately from nature ... Like a green field reflected in a calm and perfectly transparent lake, the image is distinguished from reality only by its greater softness and lustre."

When expressing thoughts that belong to the second phase of his meditation, Wordsworth uses terms that tend to generalize his feelings. As Josephine Miles notes: "Preserving the classical idea of universal norms of feeling, they (Wordsworth and Warton) wished simply to center those norms at a more precise level of observation, a 'commoner' range of feeling."(7) Wordsworth's concern was with the process of the "reception and interpretation of sensation by feeling."(8) This preoccupation shows clearly in the choice of his major terms: see, look, hear, come, and feel along with objective nouns like day, nature, earth, sun, trees, mountains, and interpretative adjectives like bright, wide, deep, old, and good. These terms are the most frequently used. In explicit feelings, Wordsworth firmly held on to the classical norms of human likeness, but to norms which "contain literal associations and direct images more individual than eighteen century classicism seemed to allow."(9)

From Wordsworth's letters and practice it appears that his constant preoccupation was to put the reader in direct contact with nature and emotions without letting his art interfere as an absolute, a thing of beauty competing with reality for attention. One is reminded of Coleridge's view that art must be a *mediatrix* between nature and man. André Malraux's remark that a poet is not so much a man who thrills at the sight of a beautiful sunset as a man who thrills at a beautiful line of poetry about a sunset, cannot be applied to Wordsworth. He uses few words or metaphors for their own beauty's sake, they all seem justified by an ulterior aim, that of bringing the reader in contact with something beyond the poem itself, that is, the poetical nature of reality and emotions.

This view, without accounting adequately for the lack of form in many of Wordsworth's poems, yet suggests that form may very well not have been of primary importance in Wordsworth's mind. If we compare his longest works with Dante's, Spencer's, or Milton's we are struck by the looseness of form in Wordsworth. Even the grammar is faulty in key passages, as, for instance, this simile from *The Excursion:*

> As the ample moon,
> In the deep stillness of a summer even
> Rising behind a thick and lofty grove,
> Burns, like an unconsuming fire of light,
> In green trees; and, kindling on all sides
> Their leafy umbrage, turns the dusky veil
> Into a substance glorious as her own,
> Yea, with her own incorporated, by power
> Capacious and serene. Like power abides
> In man's celestial spirit; virtue thus
> Sets forth and magnifies herself; thus feeds
> A calm, a beautiful, and silent fire,
> From encumbrances of mortal fire,
> From error, disappointment—nay, from guilt;
> And sometimes, so relenting justice wills,
> From palpable oppressions of despair.
> (IV, 1062)

Here the poetry of fortitude itself as a virtue appears of greater importance to Wordsworth's mind than grammatical form, or verse form for that matter. In general, however, Wordsworth is successful in expressing adequately the second phase of his meditation and, as Groom remarks, if he did not write great poems nobody can deny that he wrote great poetry.

The third phase of Wordsworth's meditation is a new insight into reality producing the inner impact of the soul coming into immediate contact with an existence different from its own but with which it identifies itself. This feeling is of its very nature inexpressible, because it cannot be objectified by the mind. It is an existential fullness, taking place in a brief and supreme moment, that subsides as soon as the mind, always eager to understand, reflects upon and analyses it. The greater the newly perceived existence, the more absorbed becomes the perceiving soul and the

less able it becomes to express its feeling articulately. The mind can only assert, in an inarticulate exclamation, the fact of such feeling.

In his delineation of the growth of his poetic mind, Wordsworth, the poet of pure diction and minute accuracy in description, repeatedly mentions the inexpressibility of some of his feelings:

> Of genius, power,
> Creation and divinity itself
> I have been speaking ....
> .....
> .....but in the main
> It lies far hidden from the reach of words.(10)

Again,

> A conflict of sensations without name(11)

And,

> my brain
> Worked with a dim and undetermined sense
> Of unknown modes of being; o'er my thoughts
> There hung a darkness call it solitude
> Or blank desertion,(12)

"Something" is a frequently used term:

> It is not quiet, is not ease;
> But something deeper far than these.

As Bernard Gromm observes: "His steady purpose and constant preoccupation were the truthful expression of a deep experience. His mind dwelt on the borderland of poetry and mysticism, and he is again and again impressed by the difficulty, amounting almost to hopelessness, of finding words to match his intuitions."(13)

It is when Wordsworth attempts to express his deepest experiences directly that the *curiosa felicitas* of his language fails him. Passages like this one from the "Ode on Intimations of Immortality":

> Not for these I raise
> The song of thanks and praise;
> But for those obstinate questionings

Of sense and outward things,
Fallings from us, vanishings;
Blank misgivings of a Creature
Moving about in worlds not realised,
High instincts before which our mortal Nature
Did tremble like a guilty Thing surprised:
(IX, 143-151)

and from "Tintern Abbey":

And I have felt
A presence that disturbed me with the joy
Of elevated thoughts; a sense sublime
Of something far more deeply interfused,
Whose dwelling is the light of setting suns,
And the round ocean and the living air,
And the blue sky, and in the mind of man:
A motion and a spirit, that impels
All moving things, all objects of all thought,
And rolls through all things.
(93-102)

seem to justify the severe criticism Wordsworth underwent not long ago: "inarticulate ecstasy before the wonders of nature,"(14) lack of precise thinking,(15) "fundamental disorders of the mind."(16) Trying to express elaborately what can only be a primitive outcry of wonder at the sudden direct intuition of the presence of the infinite within the finite, of the spirit within matter, Wordsworth was bound to grope for words or fall into a swell of empty rhetoric. In this he fails to follow his own norms for the writing of poetry as he expressed them so clearly in the 1800 Preface to the *Lyrical Ballads*. There he insisted on the necessity of returning to the language really used by men, and rustic men at that. In the passages quoted above we can hardly recognize a selection of the language spoken by men; it reminds one of Milton's diction without its precision and ample music.

But it would be unfair to base a value judgment of the whole mind of a poet on the logical analysis of a few passages that were meant to be elaborate exclamations breaking out of a deep experience.

Wordsworth amply made up for these failings. His most successful poems are those which center the totality of his inner experience in a simple image that can carry the whole weight of his complex emotion. Then, simple words, child-like or rustic, reveal more about the quality and depth of his experience than his most sonorous poems. "My heart leaps up when I behold / A rainbow in the sky" more effectively awakens the reader's meditative mood than does "Tintern Abbey." Observation, thought, responses, and especially the resulting outcry of wonder are condensed in the simple but variegated image of the rainbow. "I wandered lonely as a cloud," "The solitary reaper," "A slumber did my spirit seal," "Nutting," and several passages of *The Prelude* contain similar symbols that open to the reader's mind the depths of an exceptional soul.

At the heart of all Wordsworth's poetry lies an unabating awe at the mystery of being, and the poet's simple symbolic diction is more successful at revealing it than his most elaborate efforts of rhetoric.

NOTES

(1) *The Major English Romantic Poets*, ed. Clarence Thorpe (Carbondale, 1957), p. 141.
(2) Wordsworth's poems, except *The Prelude*, are quoted according to *Wordsworth's Poetical Works*, ed. E. De Selincourt and Helen Darbishire (Oxford at the Clarendon Press, 1958).
(3) *Biographia Literaria*, chapter xxii.
(4) *B. L.*, c. xxii.
(5) Quotations from *The Prelude* in this article are taken from *William Wordsworth's The Prelude* with a selection from the Shorter Poems and the Sonnets, ed. Carlos Baker (Rhinehart, New York, 1948).
(6) *Biographia Literaria*, loc. cit.
(7) Josephine Miles, The Continuity of Poetic Language (Berkeley and Los Angeles, 1951), p. 355.
(8) *Major English Romantic Poets*, p. 141.
(9) Miles, *Continuity*, p. 356.
(10) *Prelude*, (1850), III, lines 170-173 and 183-184.
(11) *Prelude*, (1850), x. line 290.
(12) *Prelude*, (1850), I. lines 391-394.
(13) Bernard Groom, *The Diction of Poetry from Spenser to Bridges* (Toronto, 1955), p. 174.

(14) Irving Babbit, *Rousseau and Romanticism* (Boston, 1919) p. 284.
(15) Albert Gerard, "Wordsworth in our Time," RLV, xxxii (1956), p. 134.
(16) William Empson, *Seven Types of Ambiguity* (New Directions Book, 1949), p. 151.

華滋華斯（Wordsworth）詩的結構和格式

P. E. DEMERS, SJ.

摘　　要

華滋華斯以其一生重要的時間用於沉思自然。他的沉思依三個普通的程序：觀察思想和明察透識。

華滋華斯的詩是因上述其中之一或全部程序寫成的。

SOUND AND DICTION IN T. S. ELIOT'S VERSE DRAMA

YUAN-SHU YEN (顏元叔)

This paper will discuss rhyme, rhythm and diction in the five verse plays by T. S. Eliot, *Murder in the Cathedral*, *The Family Reunion*, *The Cocktail Party*, *The Confidential Clerk*, and *The Elder Statesman*. The purpose is to examine Eliot's approach toward colloquial rhythm and diction throughout the gamut of his dramatic works as well as to assess the fitness of verse in relation to characterization in each individual play. Verse in Eliot's hands has shown a versatility greater than that which could usually be expected from prose. From the very prosaic order given to a Caterer's Man in *The Cocktail Party* to the impassioned imagistic utterance in *The Family Reunion* to the highly formalistic speeches of the tempters in *Murder in the Cathedral*, Eliot's verse has performed the function of prose and still maintained the intensity of poetry. This versatility stems chiefly from Eliot's use of various structural devices which convey a large spectrum of modes of feelings and thoughts. Eliot has good reason to say that "the human soul, in intense emotion, strives to express itself in verse" and that "if we want to get at the permanent and universal, we tend to express ourselves in verse."[1] Again he says, "A really dramatic verse can be employed, as Shakespeare employed it, to say the most matter-of-fact things."[2] Such is Eliot's faith in verse!

I

The first device of verse we are to discuss is rhyme or rhyme scheme. Nowhere does Eliot use rhymes in such profusion as in *Murder in the Cathedral*. Escaping the tyranny of the traditional blank verse for drama, Eliot falls further back on the Old English verse and uses this verse form as a norm to depart from and to return to. His variations of the alliterative verse are many, and he also employs many internal rhymes and end rhymes; his

internal rhymes are often series of identical words or sounds, and his end rhymes often run to double or triple rhymes. In this first verse drama Eliot evidently finds himself helpless to do away with the rhymes. However, his fear of the possible jingling effect as a result of rhyming compels him to rely heavily on the irregular rhymes in order to create variations. But he never rhymes only for rhyme's sake. In many instances, his rhyme scheme is used for a definite purpose. To begin with Eliot's use of end rhyme, let us examine the following speech:

> First Tempter: You see, my Lord, I do not wait upon ceremony:
> Here I have come, forgetting all acrimony,
> Hoping that your present gravity
> Will find excuse for my humble levity
> Remembering all the good time past.
>
> (p. 183)[3]

The underlined are all double, weak, and identical rhymes. Upon first reading, these rhymes do not sound serious because of their very departure from the normal end rhyme. Upon second reading, we find that the meaning tears the rhymed words apart while the rhymes try to identify each pair of words together; tension thus is generated, and the effect is comical. The tone of the speech is not only a matter of "levity" but a problem of sincerity. Even if we dwell on sound only, "ceremony" accommodating "acrimony" and "gravity" "levity", the sound value should draw in our mind's eye a simpering face and bowing body of this glib tempter. Thomas repulses him.

> Thomas: You come twenty years too late.
> First Tempter: Then I leave you to your fate.
> I leave you to the pleasures of your higher vices,
> Which will have to be paid for at higher prices.
>
> (p. 184)

"Late" and "fate" form a pair of masculine rhymes, and "vices" and "prices" a pair of feminine rhymes. "Fate" as an echo of "late" no longer implies the tempter's sly compliance but his retort and threat. By their very emphatic monosyllabic briefness, the couple of rhymed words become portentous and ominous to

Thomas Becket's life. In the last two lines, "higher" confronts "higher", and "vices" "prices"; since "higher" equals "higher", "vices" by analogy is turned into "prices" which Thomas, because of his obstinacy, will have to pay. As most of the sounds in "higher vices" and "higher prices" are identical, the "v" and the "pr" sounds should be emphatically articulated in order to bring out the contradistinction in meanings. Otherwise, the contrast in meaning would be lost in the midst of equalization of sounds. But both equalization and contrast have to be subtly maintained in order to convey the tempter's dark threat.

Turning to alliteration, we turn also to the second tempter. The second tempter's speeches are the most heavily alliterated in the play. For instance,

> Second Tempter: Sadness
> Only to those giving love to God alone.
> Fare forward, shun two files of shadows:
> Mirth merrymaking, melting strength in sweetness,
> Fiddling to feebleness, doomed to disdain;
> And godlovers' longings, lost in God.
> Shall he who held the solid substance
> Wander waking with deceitful shadows?
> Power is present. Holiness hereafter.
>
> (p. 186)

The basic pattern being Old English verse, all these lines are in one way or another variations of the standard form. Stressed and unstressed syllables are alliterated, and usually each line contains two sets of alliterations instead of one. Most inventive is the last line where alliteration neatly and rigidly cuts the line into halves with an emphatic period; nothing could be more balanced. But the balanced halves run against each other in meaning, "power" against "holiness", and "present" against "hereafter." The similarity in form accentuates the dissimilarity in meaning. Moreover, the second tempter being a grim-faced diplomat, his alliterative verses produce a pounding effect as if his words are hammered syllable by syllable into Thomas's head.

For regular internal rhyme Eliot often substitutes identical words or identical sounds. For example, the third tempter repeats

the word "country" six times in four consecutive lines. Identical words may be taken as a variation of internal rhymes. But, essentially, an identical word tends to stress itself through repetition rather than to hold a passage together. Occasionally Eliot uses the internal rhyme skillfully.

> Thomas: No!
> Who are you, tempting with my own desires?
> Others have come, temporal tempters,
> With pleasure and power at palpable price.
> What do you offer? What do you ask?
>
> (p. 193)

And sometimes Eliot can write such beautiful lines as: "But real friendship, once *ended*, cannot be *mended*" and "You would wait for tr*ap* to sn*ap*." Eliot the rhymer is at his best in the following couplet:

> The Four Knights:
> .....
> Creeping out of the London dirt,
> Crawling up like a louse on your shirt,
>
> (p. 203)

In two short lines Eliot has blended three kinds of rhyme together, end rhyme, internal rhyme, and alliteration, in a most effective way. For alliteration there are the "c" in "creeping" and "crawling" and the "l" in "London" and "like" and "louse". For internal rhyme there is the "irt" in "dirt" and "shirt". The total sound effect is far greater than the sum of the individual rhymes. First of all, the movement of the "louse" is started by "creeping", and the "louse" creeps out of the London dirt. It continues to creep, and then it crawls up on "your shirt". The important implication here is that this "louse" has an insatiable and persistent desire to move upward. And the upward movement is emphatically and pictorially rendered by adding "crawling" to "creeping". The effect would not emerge as strikingly as it does, if "crawling" and "creeping" were not alliterated as well as rhymed simultaneously. The key word in the two lines is "louse", whose appearance has been prepared for and anticipated by the three "l's" (including the "l"

in "crawling") and by the "ou" sound in "out" and the "aw" sound in "crawling". When it finally appears, no one could possibly miss the accumulated sound value in "louse". "Dirt" and "shirt" are regular masculine end rhyme, and they tend to heighten the explosiveness of the abusing tone of the accusers. This pair of rhymed words rivet the two lines together at the end just as "creeping" and "crawling", the pair of alliterated words, do at the beginning. So far as craftsmanship is concerned, these lines are incomparable in Eliot's verse drama.

There is no doubt that rhyme has been over-used in *Murder in the Cathedral*, so much so that an atmosphere of artificiality covers the whole drama, in spite of Eliot's skillful manipulation of the rhyme. This artificiality can only be justified on the ground that the speakers are men in the twelfth century. Remote characters condone a remote idiom which Eliot himself calls "neutral." It is quite possible that, leaving the traditional dramatic blank verse behind, Eliot suddenly finds himself in the middle of nowhere and has to cling desperately to a certain formalistic pattern with which to hold his verses together. The rhyme has served him in this sense, although it has betrayed his desperateness through its over-abundance.

Coming to *The Family Reunion*, we find this artificiality greatly reduced. Evidently, Eliot begins to find some ease with his medium and is able to make a step forward to approach the colloquial speech. There are in *The Family Reunion* only a handful of alliterated verses, and internal rhymes and end rhymes do not become rampant either. Some identical sounds such as "-ing," "-ion," and "-er" are repeated at irregular intervals for various reasons. For instance, in the first scene while the elder members of the family are chattering about the younger generation, the word "generation" is repeated no less than five times by several characters. The "-tion" sound thus becomes the key note in their speeches. When Gerald finally descends upon Mary and forces her to opine about the younger generation, Mary, "getting on for thirty" and still unmarried, is hurt and retorts with much bile. Taking over the "-tion" sound, she mocks Gerald like this:

Really, Cousin Gerald, if you want information
About the younger generation, you must ask someone else.
I'm afraid that I don't deserve the compliment:
I don't belong to any generation.

(p. 227)

On another occasion the very "-tion" sound is employed to distinguish one character's speech from those of others in order to reveal the former's unique awareness of reality. The family are waiting for Harry's homecoming after his eight years of absence. They have been prattling tediously, ignorant of the impending crisis that Harry's return will give rise to. Only Agatha is different; her premonition of the coming crisis is revealed in her speech.

Agatha: Thus with most careful devotion
Thus with precise attention
To detail, interfering preparation
Of that which is already prepared
Men tighten the knot of confusion
Into perfect misunderstanding,
Reflecting all the admonitions
From the world around the corner
The wind's talk in the dry holly tree
The inclination of the moon
The attraction of the dark passage
The paw under the door.

(pp. 230-1)

The pattern of the "-ion" as well as the "-ing" sounds constitute a tonal urgency which intensifies Agatha's poetic perception into reality. Note also the stream of run-on lines until it is stopped for a second at the end of "misunderstanding" and, presently, is again carried over and on by the word "reflecting". In general, this kind of brain work in rhyme scheme is rare in the play. Evidently, Eliot is no longer preoccupied with rhyming here.

If Eliot has used little rhyming in *The Family Reunion*, he does even less rhyming in *The Cocktail Party*. Alliteration is reduced next to nothing, and end rhyme and internal rhyme, if ever present, are used primarily for comical effect. For example, in the opening scene, "Maharaja" is rhymed with "Julia" who insists on knowing what Alex did with the Maharaja up in a tree. A little later, the

word "it" appears nine times at the end of each of ten consecutive lines: this generates a feeling of flatness and insipidness proper to party conversations of which these ten lines are a part; or rather, the monotony and shallowness of party conversations is mocked by the very repetition of a simplistic and simple-minded word "it". Instead of regular rhymes, Eliot shows an increasing tendency to use identical sounds for the sake of getting echoes; whether everyday speech is like that is a problem for the linguist to decide. So far as the use of rhyme is concerned, Eliot plunges to the nadir in *The Confidential Clerk*. *The Confidential Clerk* is a bankruptcy in verse form; rhyme in any form is completely absent, and thus Eliot has deprived himself of one of the major devices for binding and heightening his verses. In his approach toward the colloquialization of his verse, Eliot has here actually made his verse prose—very prosaic prose, for that matter.

After the destructive relaxation of verse form in *The Confidential Clerk*, especially in the matter of rhyme, Eliot evidently feels that he has gone too far and astray. So, in his last play, *The Elder Statesman*, he makes an effort to tighten up his verse form again by a return to rhyming, and it is interesting to note that he returns specifically to his first play, *Murder in the Cathedral*. For in *The Elder Statesman* the most prominent and functional rhyme is alliteration. Two examples should suffice.

> So I've been informed.
> I have friends in the press--if not in the peerage.
> Good-bye for the present.
>
> (p. 48)

And,

> The many many mistakes I have made
> My whole life through, mistake upon mistake,
> The mistaken attempts to correct mistakes
> By methods which proved to be equally mistaken.
> I see that your mother and I, in our failure
> To understand each other, both misunderstood you
> In our divergent ways.
>
> (p. 121)

The first quotation is by Gomez, a character not unlike the second tempter in *Murder in the Cathedral*, and his "p" alliteration here

is used for an effect similar to that of the second tempter's verses, that of mockery. The second quotation is by Lord Claverton, and the overwhelming "m" alliteration in his speech accumulatively and acutely makes clear his contrition for the mistakes he made. Even in the use of end rhyme, this play harks back to the first play. Such rhyming as

> Really, Dick, you owe me an apology.
> Blackmail! On the contrary...

or

> Ah, the pre-arranged interruption
> To terminate the unwelcome intrusion
>
> (p. 46)

possesses the same mocking mimicry as that of the rhymes of Thomas's tempters. However, so far as the number of rhymes is concerned, there is no comparison between this play and *Murder in the Cathedral*. Rhymes are used economically in *The Elder Statesman*. But the significant thing is that in comparison with *The Confidential Clerk* the handful of rhymed passages in *The Elder Statesman* bears witness to the fact that Eliot, after the prosodic bankruptcy in *The Confidential Clerk*, wakes again to the necessity of some formal control.

II

Rhythm involes primarily caesuras and stresses in a line. Eliot himself has said:

> What I have worked out is substantially what I have continued to employ: a line of varying length and varying number of syllables, with a caesura and three stresses. The caesura and the stresses may come at different places, almost anywhere in the line; the stresses may be close together or well separated by light syllables; the only rule being that there must be one stress on one side of the caesura and two on the other[4]

But one of Eliot's best critics, Helen Gardner, has made an observation considerably different from Eliot's own. She says:

> Mr. Eliot has freed the metre by exercising a far greater liberty within the line in the number of syllables, and by using the four-stress line as a norm to depart from and return to.[5]

My examination of the matter will show that Helen Gardner is nearer the truth than Eliot himself. The majority of the lines in the five plays have four stresses. Lines of more than four stresses come second; lines of less than four stresses constitute only a minority. To assign four stresses to a line is especially necessary in *Murder in the Cathedral*, where heavily alliterated lines split into balanced halves which naturally require four stresses. With lines not alliterated but balanced around the caesura, two stresses in either half of the line are also indispensable.

> They knów and do not knów, what it is to áct or súffer.
> They knów and do not knów, that ácting is súffering
> And súffering is áction. Neíther does the actor súffer
> Nór the patient áct. But bóth are fíxed
> In an etérnal áction, and etérnal pátience.
>
> (p. 182)

Not alliterated, these lines are balanced around the caesura which falls in the middle of the line. If unequal numbers of stresses were given to the half line, the structural balance would disappear. As for a regular alliterative verse like "Prívate pólicy is públic prófit" or a semi-alliterative verse like "Cábined in Cánterbury, réalmless rúler," not even Eliot himself could deny two stresses to either side of the caesura. It appears that the balanced lines are mostly used for argument, reasoning, or meditation. When emotions are roused, the balanced pattern often breaks up, giving way to irregular positioning of caesuras and uneven numbers of stresses. Good illustrations can be found in the speeches of the excited and panicky priests and some of Thomas's speeches just before his death. An extreme example would be the choral verse, which, unusually long, needs several caesuras before the line runs out. However, in regular speeches, the four-stress and middle-caesura pattern is the rule. This gives the verses in *Murder in the Cathedral* a highly formalistic pattern.

If in *The Family Reunion* Eliot has succeeded in rejecting the alliterative verse pattern, the balanced syntax of *Murder in the Cathedral* is still inherited here. The verses, without the burden

of alliteration, still carry equal numbers of stresses on either side of the caesura.

> Í have always tóld Ámy she shóuld go sóuth in the wínter.
> Were Í in Ámy's posítion, Í would go sóuth in the wínter.
> Í would fóllow the sún, not waít for the sún to cóme here.
> (p. 225)

The caesura always falls in the middle of the line with three stresses on either side. This regularity produces, however, a sing-song effect, which is especially so after the same pattern persists for any length of time. The speeches in the first scene are a case in point. Ivy, Violet, Charles, and Gerald speak balanced verses most of the time. Since they are inane and slow-witted, their sing-song verses nicely catch the contour of their mental dullness. Roused emotions also dash to pieces the balanced pattern as they do in the first play. But here another factor appears to destroy the syntactical balance, and that is the down-right conversational speeches. Warburton's first speech which opens his interview with Harry is a case in point. This feature, the unbalanced conversational speech, while a rarity here, will become the rule in *The Confidential Clerk*. Generally speaking, Eliot has now arrived at a rhythm quite close to everyday speech. Either when the content is as prosaic as Warburton's conversation or when it is as impassioned as Harry's and Agatha's poetic utterance, Eliot can manage them all like good everyday speech. But this newly-achieved merit has not become prevalent; balanced syntax, inherited from *Murder in The Cathedral*, still carries the day.

> *The Cocktail Party* begins with:
> Alex: You've missed the point completely, Julia:
> There were no tigers. That was the point.
> Julia: Then what were you doing, up in a tree:
> You and the Maharaja?
> Alex: My dear Julia!
> It's perfectly hopeless. You haven't been listening.
> (p. 297)

Of the five lines above, three lines are unbalanced with the caesura coming after the third stress; one line is composed of two half lines; only two lines are structurally balanced and they are spaced

apart. Consequently, the rhythm is varied and lively and the sprightly party conversation thus starts the play. What follows are still more varied lines, some of which require no less than seven to eight stresses while others have only three. There is a good number of half lines to break any possible sing-song rhythm. Moreover, an increasing number of single words are used separately. An excellent illustration would be:

Peter: Oh...Is she married?
Alex: Not married, but dead,
Lavinina: Celia?
Alex: Dead.
Peter: Dead. That knocks the bottom out of it.
Edwad: Celia dead.

(p. 380)

The effect of these spaced single words, announcing the death of a friend, is that of the "tolling the one bell only." Here Eliot has used everyday conversation to create an effect usually only possible in verse. Furthermore, in previous plays Eliot tends to fill out the line, afraid of losing control of the verse form. But here he has the courage to do the opposite, which can be interpreted as a great step forward toward speech rhythm. We do still find balanced lines here and there, but they never persist to any considerable length. The only person who still speaks more or less balanced and patterned verses is Reilly, the Sir Oracle in this play; his voice certainly needs the formalistic structure to convey the weight of his message. As to the speeches of the other characters, they possess basically the everyday speech rhythm married to a poetic content.

Coming down to *The Confidential Clerk*, we are puzzled and then disappointed. For so far as the verse in this play is concerned, Eliot is writing prose. Verse can hardly be verse unless it carries a certain metric control of which, however, the verse of *The Confidential Clerk* possesses little. The lines being structurally extremely free, the only perceptible metric pattern is the four stresses to a line, a practice Eliot has adopted ever since *Murder in the Cathedral*. But this formal element is so intangible that it

alone is insufficient to bequeath to the line, let us say, a feeling of verse. Take, for instance,

> I simply can't guess what her reaction would be.
> There's a lot I don't understand about my wife.
> There's always something one's ignorant of
> About anyone, however well one knows them.
>
> (p. 18)

The above passage is spoken by Sir Claude in a moment when he is supposed to be emotionally roused and should be pouring out poetry. But the rhythm is so insipid and so lacking in tonal muscle that one can hardly call it verse, not to say poetry. Such a passage is representative of the play where much is even worse.

The use of half lines which became noticeable in *The Cocktail Party* here becomes rampant. A rough count reveals that as much as sixty percent of the speeches begin and end with a half line. Let us have a few samples:

> Eggerson:
> .....
> She's very absent-mined.
> Colby: I hope you don't mean,
> She has lapses of memory?
> Eggerson: I didn't mean that.
>
> (p. 31)

And,

> Lucasta:
> Is this a meeting? I came to speak to Colby.
> I'm sorry.
> Sir Claude:
> Colby will be here.
> But you're not involved in this meeting, Lucasta.
> Won't it do another time?
> Lucasta: I came to apologize
> .....
>
> (p. 115)

The ubiquitous half line, beginning or ending a speech or both, betrays Eliot's rather desperate effort to vary the rhythm of his verses. For the verses in this play, especially when they come in blocs, sound monotonous, mechanical. For instance,

Mrs. Guzzard:
Consider, Sir Claude. Would I tell you all this
Unless it was true? In telling you the truth
I am sacrificing my ambitions for Colby.
I am sacrificing also my previous sacrifice.
This is even greater than the sacrifice I made
When I let you claim him...
(p. 151)

Mrs. Guzzard is supposed to be speaking with emotion, but her verses sound very tame. There may be a number of reasons which go to make for this effect, for instance, the lack of adroitly manipulated caesuras, the lack of rhymes and what not. Nevertheless, the auditory monotony is a fact. And this monotony Eliot wishes to attenuate with a prodigious number of half lines. But the attempt is a failure. The half lines at the beginning or the end of a speech do not actually affect to any appreciable degree the sound effect within the speech, especially an extended speech. On the contrary, these repeated vain attempts only betray Eliot's desperateness.

Eliot's final play, *The Elder Statesman*, marks a return to formalistic verse. This indicates Eliot's desire to regain some formal control over his verse. The fact is, in this last play we have many echoes from the first play, *Murder in The Cathedral*. In the following speech Gomez is reminding Lord Claverton of the harm the latter had done to the former by patronizing him.

It's done already, Dick; done many years ago:
Adoption tried, and grappled to my soul
With hoops of steel, and all that sort of thing.
We'll come to that, very soon. Isn't it strange
That there should always have been this bond between us?
(p. 37)

The four stresses to each line are here, the middle-caesura is here, and the absolute structure "Adoption tried, and grappled to my soul/With hoops of steel, and all that sort of thing" is here too. But of course after the formal relaxation in *The Confidential Clerk* Eliot has learned to avoid the mechanicalness which is a flaw in the verse form in his first play. Thus, in the use of caesura he creates variations by means of varied positioning of the caesura

in the first, fourth, and fifth lines: the first two lines have two breaks each while the final line has hardly a caesura at all. Such a verse pattern not only creates a colloquial speech rhythm but still maintains an adequate prosodic control. Let us have speeches from two moments when the hero, Lord Claverton, is in the clutches of an emotional crisis:

> What I want to escape from
> Is myself, is the past. But what a coward I am,
> To talk of escaping! And what a hypocrite!
> A few moments ago I was pleading with Michael
> Not to try to escape from his own past failures:
> I said I knew from experience. Do I understand the meaning
> Of the lesson I would teach? Come, I'll start to learn again.
> Michael and I shall go to school together.
> We'll sit side by side, at little desks
> And suffer the same humiliations
> At the hands of the same master. But have I still time?
> There is time for Michael. Is it too late for me, Monica?
> (p. 97)

> This may surprise you: I feel at peace now.
> It is the peace that ensues upon contrition
> When contrition ensues upon knowledge of the truth.
> Why did I always want to dominate my children?
> Why did I mark out a narrow path for Michael?
> Because I wanted to perpetuate myself in him.
> Why did I want to keep you to myself, Monica?
> Because I wanted you to give your life to adoring
> The man that I pretended to myself that I was,
> So that I could believe in my own pretences.
> I've only just now had the illumination
> Of knowing what love is. We all think we know,
> But how few of us do! And now I feel happy—
> In spite of everything, in defiance of reason,
> I have been brushed by the wing of happiness.
> And I am happy, Monica, that you have found a man
> Whom you can love for the man he really is.
> (p. 128)

In these two extended and emotion-filled speeches of Lord Claverton, the first thing we note is the more or less even length of the lines. Although there are four lines in the first quotation which are longer than usual, they form pairs and balance each other within the pair. The other lines in both speeches are almost of the same

length. The second thing one notes is the balance in syntactical structure. Let us cite a few illustrations: "To talk of escaping! And what a hypocrite!" "I said I knew from experience. Do I understand the meaning." "There is time for Michael. Is it too late for me, Monica?" In the second speech, balanced structure occurs between lines 5 and 6 and lines 7 and 8: each pair has the same pattern beginning with "Why .../ Because ..." Balance is also found in juxtaposed prepositional phrases in line 14, "In spite of everything, in defiance of reason." All these balanced constructions come under the usual practice in prosody: repetition through variation. And this creates a rhythm which is fit for emphatic emotional utterances, while occasional irregular lines thrown in the midst of the balanced structure prevent the sound pattern from becoming monotonous and mechanical. I think here Eliot has finally achieved the marriage of the poetic and the colloquial.

Generally speaking, Eliot's effort in achieving contemporary speech rhythm in his plays is successful. Reviewing the first three plays in a lecture, Eliot himself admits that his only concern with the versification in *Murder in the Cathedral* is to escape the shadow of Shakespeare and he leaves the metric an unsolved problem.[6] He claims that he has solved the problem in *The Family Reunion* by devising "a rhythm close to contemporary speech, in which the stresses could be made to come wherever we should naturally put them, in uttering the particular phrase on the particular occasion."[7] Coming down to *The Cocktail Party,* he says that he has found a form of versification that could serve all his purposes without recourse to prose.[8] I think this self-assessment is well justified by his actual performance. But it is evident he is not completely satisfied with what he has achieved in *The Cocktail Party,* and he continues his experiment in *The Confidential Clerk.* Here his prosodic wing brushes too closely the everyday speech and he loses equipoise and falls into prosaic and formless prose. However, in the ultimate sense, this experience may be constructive. For after this abortive experiment, Eliot is able to rise and reach a level where his verse begins to fuse harmoniously the poetic content

with the colloquial rhythm. In *The Family Reunion* and *The Cocktail Party* Eliot's verse is still quite self-conscious, but in the last play it is delightfully natural. It seems that in his final step Eliot has gone farthest.

III

Turning to diction, we are turning to the use of language. Since this is a large problem I will limit myself to the discussion of the relevance of diction in relation to characterization and the imagery. In the first part of *Murder in the Cathedral* Thomas employs chiefly an abstract and spiritual diction. His favorite words are "temptation," "suffering," "action," "eternal," "damnation," "the impossible," "the undesirable." And his famous remark is "They know and do not know." In this part, Eliot's purpose is to see Thomas through a test not unlike that of Christ's. Since Thomas's mind is directed toward heaven, his diction naturally becomes spiritually rarefied. But in the second part of the play, Thomas's diction undergoes a change. Facing those murderous knights who accuse him of treason, Thomas uses a dialectical language with deep political coloring.

> Thomas: What you have to say
> By the King's command—if it be the King's command—
> Should be said in public. If you make charges,
> Then in public I will refute them.
>
> (p. 204)

Here is a language not for sounding the spiritual depths but for self-defense on judicial grounds. Thomas may use either a spiritual diction or a judicial diction, yet his language is still considerably different from that of the four tempters. The first tempter is full of social and merrymaking words; the second tempter uses a "power and glory" vocabulary; the third tempter reasons with a partisan's lingo; and the fourth tempter borrows Thomas's language to tempt him on his own ground. Perhaps, most interesting in the use of diction are the four knights' speeches in the prose section. While in the verse speeches they speak unanimously a vulgar and blasphemous language, in their prose speeches they become differen-

tiated. The first knight speaks like a barrister, playing with such diction as "fair play," "trial," "jury," "case." The second knight self-consciously clears himself and his fellow murderers of any possible financial interest that might be exploited from the murder. His speech is the most modern of the four because it is most business-like; some of his typical words and phrases are "disinterested," "lose," "gain," "job," "penny," "credit," "business," "we are not getting anything out of this." The third knight tries to justify their murder on political grounds; thus he employs "order," "powers of local government," "judiciary," "justice," "court," "administrator," "ideal state." The fourth knight argues that Thomas wills his own martyrdom. He juggles with such terms as "monster of egotism," "mania," "Unsound Mind," "Suicide," implying that Thomas actually perished through his own death wish. We wonder whether he had taken a course in modern psychoanalysis.

The diction in *The Family Reunion* is regulated by the scale of sensibility of the various members in the family. Ivy, Violet, Charles, and Gerald are on the bottom of the scale; so their diction is that of the everyday social chitchat, seldom charged with genuine emotions which make poetic utterance possible. Their silliest moment comes when they, on a false assumption, think that Harry is going to become a missionary; they start right away to offer Harry all kinds of inane advice. They advise Harry to learn "several dialects," plus a bit of "medical knowledge,"; they also ask Harry to get "religious qualification" and "various inoculations," absolutely ignorant of the spiritual crisis that Harry has been experiencing. Amy is higher than they on the scale of sensibility. Her language sometimes rises to imagistic heights, and she is poetic enough to say "I do not want the clock to stop in the dark." But her deep concern with the house, Wishwood, compels her to be materialistic and mundane. Thus, impassioned and poetic as her language sometimes is, it never reflects any spiritual depths.

Mary and Agatha have about the same degree of sensibility. When they are worked up emotionally, they are able to use a highly poetic language.

Mary: .....
I believe the moment of birth
Is when we have knowledge of death
I believe the season of birth
Is the season of sacrifice.
(p. 252)

Agatha: .....
..... It is possible
You are the consciousness of your unhappy family,
Its bird sent flying through the purgatorial flame.
Indeed it is possible. You may learn hereafter,
Moving alone through flames of ice, chosen
To resolve the enchantment under which we suffer
(p. 275)

Comparing these two speeches which are both addressed to Harry, we find that Agatha's verses are even more imagistic than Mary's. In their less impassioned speeches, Mary's diction betrays her lack of "moral courage." But Agatha's voice is always positive and resolute. Compare Mary's "Well, it seemed all to be imposed upon us" with Agatha's "hold fast to that/As the way to freedom." The use of passive verbs with Mary and active verbs with Agatha is very illuminating of their different characters. Later, when Harry is about to leave, Agatha says to Mary: "We must all go, each in his own direction,/You, and I, and Harry." In a way, she is the female Reilly of *The Cocktail Party*.

Turning to Harry, I do not wish to discuss his imagistic language, which is similar to Agatha's. But while Agatha is always sure of what she wants to say, Harry is inhibited by a consciousness of the inadequacy of language to express his inner most thoughts. It is very typical for Harry to say:

To be living on several planes at once
Though one cannot speak with several voices at once.
(p. 266)

Truly, language has only one voice at a time, but for Harry there have to be several voices all speaking simultaneously in order to give vent to his pregnant heart. This is why Harry at first refuses to talk to anybody. His feeling of the discrepancy between the

truth and the word is so acute that when he does try to express himself he has to resort to an erudite diction.

Harry: .....
And the eye adjusts itself to a twilight
Where the dead stone is seen to be batrachian,
The aphyllous branch ophidian.
(p. 249)

The three underlined Greek words must mean for Harry something more than just the English equivalents, "frog," "leafless," "snake," can signify. He must have felt that only these three exotic words together with their sounds and shapes could possibly grasp the contour of what he intends to convey.

In *The Cocktail Party,* Edward's language sometimes rises to imagistic heights, which, unfortunately, are beyond his wife, Lavinia, a mere commonplace socialite.

Edward: There was a door
And I could not open it. I could not touch the handle.
.....
..... There is nothing to escape from
And nothing to escape to. One is always alone.
Lavinia:
Edward, what are you talking about?
(p. 342)

More interesting are the languages of Julia, Reilly, and Celia. At first, Celia speaks the kind of cocktail party language like everybody else. But when she comes to Reilly for spiritual guidance, her language becomes candid and humble. Two features are most noticeable: she almost always begins her speeches with "Well..." and most of the time she uses the negative statement such as "I don't mind," "I cannot argue," "I can't pretend." These negative speech habits foreshadow her final disillusionment with the sophisticated and fashionable world.

Reilly's voice is always authoritative. At first, his lines are peppered with the physician's jargon: "prescription," "breathe deeply," "relaxed position," "surgical operation," "nursing home." Very soon he discovers his true identity as a guide of the soul: "You will change your mind, but you are not free." "It is a serious

matter/To bring someone back from the dead." "Ah, but we die to each other daily." His authoritative voice ranges from "But I put it to you" to "Go in peace, my daughter./Work out your salvation with diligence." Except once to Julia who is his assistant, Reilly never uses images. As a spiritual director, he may think that imagistic language might blur the edge of his message. He prefers, like Thomas Becket, the abstract language to enlighten his "sons" and "daughters" who have gone astray in life. Julia is the most intriguing character in the play. When she is with her party friends she plays the role of the "dreadful old woman"; her language then is silly and frivolous. Yet even then her hidden intelligence is sometimes discernible to the careful reader. Knowing that Lavinia has left Edward and refraining from pricking the bubble of Edward's fiction that his wife is only away with her sick aunt, Julia asks where the sick aunt is.

> Edward: ... In the depths of Essex.
> Julia Well, we won't probe into it.
> (p. 302)

Julia is capable of this kind of verbal wit. Her well-concealed symbols—glasses with one lens missing and half a bottle of champaigne—reveal her mental agility. However, on the surface, she deliberately cultivates the impression of being a clown. Her serious and true self is only shown to Reilly who is her partner in this business of looking after people's souls. After hearing Reilly's diagnoses of the three patients spiritually ill, she speaks out in a voice without the least clownishness.

> Julia: Very well then. We must take the risk.
> All we could do was to give them the chance.
> And now, when they are stripped naked to their souls
> And can choose, whether to put on proper costumes
> Or huddle quickly into new disguises,
> They have, for the first time, somewhere to start from.
> (p. 367)

Here she is speaking like Reilly, utterly unlike the Julia in the cocktail party.

With *The Confidential Clerk* we cannot do the kind of work as we did with the previous plays by differentiating the characters through speeches. Here, all the characters speak more or less the same language. There are no linguistic particularities to tell a speech by Sir Claude from that by Mrs. Guzzard or a speech by Lady Elizabeth from that by Colby. Everyone is using what Eliot might call a "neutral language." Only Eggerson's language is colloquial to the extent as to be different from that of the rest of the cast. His most frequent speech mannerism is that everybody has "a heart of gold." Eggerson does not have an interesting mind, nor does he have an interesting personality. Consequently, his speech, though colloquial but without interesting content, often sounds blandly silly. He is occupying a place in this play as Reilly does in the previous, but he is certainly an unworthy descendant from that powerful spiritual guide. Mrs. Guzzard, a woman from a social echelon lower than anybody else in the play, speaks nevertheless Sir Claude's language. Eliot seems to have forgotten that diction should still be used as an effective means to characterize characters. Let us have one passage from Sir Claude and Mrs. Guzzard respectively when both of them are at their impassioned heights.

Sir Claude:

And perhaps, some time, you will let me hear you play.
I shan't mention it again. I'll wait until you ask me.
Do you understand now what I meant when I spoke
Of accepting the terms life imposes upon you
Even to the point of accepting...make-believe?

(p. 50)

Mrs. Guzzard: .....
..... In telling you the truth
I am sacrificing my ambitions for Colby.
I am sacrificing also my previous sacrifice.
This is even greater than the sacrifice I made
When I let you claim him.

(p. 151)

There is no distinctive feature to differentiate one speech from the other although the two characters are completely different.

I am of the opinion that Eliot willfully deprives the play of imagery. Imagery often occurs and should occur when some

emotional crisis is reached as is the case with his previous plays. But this is not so here. For example, toward the end of Act I when Sir Claude and Colby are revealing their inner self to each other, Colby says:

> That I feel myself becoming—though he fascinates me.
> And yet from time to time, when I least expect it,
> When my mind is cleared and empty, walking in the street
> Or waking in the night, then the former person,
> The person I used to be, returned to take possession.
>
> (p. 45)

One can almost feel, especially in the last few lines of the quotation, that Colby is ready to spout a few images to give his utterance a measure of poetic intensity. But Eliot does not let him do it. In Act II when Lucasta is talking to Colby, the volatile girl several times is emotionally roused. For instance,

> No, you're either above caring,
> Or else you're insensible—I don't mean insensitivity!
> But you're terribly cold. Or else you've some fire
> To warm you, that isn't the same kind of fire
> That warms other people...
>
> (p. 122)

The occasion calls for imagistic utterance, which never comes. The fire image is too common to be called a poetic image. And everything is stated with the barest and most prosaic diction. Since this play is so vigorously purged of imagery, when some one image does appear it becomes a misfit in the prevailingly prosaic context. This actually takes place when Sir Claude has been delivering a lengthy speech to Colby in the later half of Act I, all free of images; then toward the end, he says:

> I intend that you shall have a good piano. The best.
> And when you are alone at your piano, in the evening,
> I believe you will go through the private door
> Into the real world, as I do, sometimes.
>
> (p. 49)

This "private door" image, unfortunately, stands out as an intrusion within the context. Besides, the "door" image, used so many times in his previous plays, is actually a cliché by now.

So far as language in relation to characters is concerned, *The Elder Statesman,* to a certain degree, is not unlike *The Confidential Clerk.* If the speech is lopped off its speaker, the one can hardly be identified with the other. However, Gomez's speech is slightly different from the others'. Gomez, with a strong resemblance to the tempters in *Murder in the Cathedral,* emerges from the hero's past and forces the hero to face what he was. Because of this fact, his speeches constantly remind us of the tempters'. In one passage, which I have already quoted in this essay, Gomez comes closest to the tempters in diction and tone.

> It's done already, Dick; done many years ago:
> Adoption tried, and grappled to my soul
> With hoops of steel, and all that sort of thing.
> We'll come to that, very soon. Isn't it strange
> That there should always have been this bond between us?
> (p. 37)

Certainly, it cannot be denied there is some difference, for instance, in the use of such a colloquialism as "and all that sort of thing," but the prevailing line structure and diction undeniably hark back to the tempters' speeches. After all, after *The Confidential Clerk* where a complete relaxation in colloquial speech is witnessed, Eliot could not possibly launch a total return to his first play. Another character, Mrs. Carghill, plays a very similar role in relation to the hero as does Gomez. However, her speech, unlike Gomez's, is very much in the vein of that of Lord Claverton and of the rest of the cast.

Generally speaking, the diction in this play is much more formal than the diction in *The Confidential Clerk.* Formal words with a touch of the abstract occur again and again in Lord Claverton's speeches. "Humiliation," "contrition," "narrow path," "perpetuate," "pretences," "illumination," "defiance," "reason," are just a few samples. With these formal and abstract words Lord Claverton's language is brought to a level on which spiritual matters—his contrition and his achievement of self-knowledge—can be dealt with adequately. Very close to Lord Claverton's language is the language of his daughter Monica, who is faithful to her

father and shares his innermost thought. Lord Claverton's son uses language with a colloquial twist, which is rather in keeping with his free and rebellious character. For instance, after he has made up his mind to go with Gomez to South America to start a new career, he says:

> I don't care about that. He's offered me the job
> With jolly good pay, and some pickings in commissions.
> He's made a fortune there. San Marco for me!
> (p. 117)

His exhilaration is adequately presented in the tone and in the colloquial expressions. However, in general, the speeches here have not ascended to that high degree of differentiation in relation to characters as in Eliot's first three plays.

Although images are relatively few in this play, they, are certainly more in number than in *The Confidential Clerk*. Besides, when these few images do make their appearance they do not intrude but are assimilated into the context. For instance, Lord Claverton, after he has made a clean breast of his past, feels finally the soothing peace at heart. He says: "I have been brushed by the wing of happiness." Since he has been using a formal abstract diction in the speech, this "wing" image emerges naturally and harmoniously. The perennial "door" image occurs in Charles's speech: "It's as if he had passed through some door unseen by us" (p. 130). A conventional image is found in "Is so often a harbinger of frost on the fruit trees" (p. 54). And a poetic image in "...It crept so softly/On silent feet..." (p. 15). These together with about half a dozen other images harmonized into the context contribute to the poetic quality which exists in a high degree in this play.

Looking back through the vista formed by the five plays by Eliot, we can see that Eliot is constantly experimenting in an attempt to discover a proper medium for verse drama. Thus, the five plays are different from one another in formal matters as well as in diction. It is hard to say where Eliot has arrived at his highest point of achievement. Rather, he moves restlessly here and there, and his five plays are just five different experiments.

If we compel ourselves to talk about Eliot's progress and plot it, we may possibly say that from the first play to the third play Eliot is on an ascending line and that in the fourth play he hits the bottom through a prosodic bankruptcy and then he rises again in the fifth play. No matter what one may say in favor of Eliot, his verse plays are essentially experiments—though successful experiments sometimes. I think the dilemma that harasses Eliot all the time is his desire to marry the poetic with the colloquial within the verse form. In his attempt to approach the colloquial, he loses his footing in the realistic. And speech realism is actually quite undesirable in verse drama. This is why he fails in *The Confidential Clerk*. Shakespeare's dramatic verse is not the realistic and prosaic speech of everyday use, although it is pliant and versatile enough to express anything everyday speech can or even cannot express. Thus, we can safely say that it is necessary to maintain a certain formalistic control to keep dramatic verse away and from the downright colloquial. It is all right to approach the colloquial in rhythm and diction but never to identify with it. If it does, it loses the poetic form which is the soul of verse drama.

NOTES

(1) T S. Eliot, *Selected Essays* (New York, 1932), p. 34.
(2) Eliot, *On Poetry and Poets* (New York, 1961), p. 82.
(3) Eliot, *The Complete Poems and Plays 1905-1950* (New York, 1952).
All quotations from the first three plays are from this edition, to which the page number at the end of each quotation is referred.
Quotations from *The Confidential Clerk* are from the Harcourt Brace edition of 1954, and those from *The Elder Statesman* are from the Farrar, Straus and Cudahy edition of 1959; both published in New York.
(4) *On Poetry and Poets*, p. 88.
(5) Helen Gardner, *The Art of T. S. Eliot* (London, 1949), p. 32.
(6) *On Poetry and Poets*, p. 85.
(7) *Ibid.*, p. 88.
(8) *Ibid.*, p. 91.

歐立德詩劇的音響與字質

顏 元 叔

本文的主要目的，是研究歐立德詩劇的音響與字質，對口頭語的關係，也就是說，歐立德如何運用戲劇的韻文，去接近口頭語的旋律與字彙。歐立德自己曾經說過，他期望創造一種韻文，能够表達任何的情感與思想，就如莎士比亞的無韻詩一般。歐立德一生寫成五部完整的詩劇，那便是：「大教堂內的謀殺」，「家庭團圓」，「鷄尾酒會」，「私人秘書」，「元老政治家」。中文譯名似乎俗氣，其實這些劇本都是以精神價值爲中心主題，和歐立德的詩，互相輝映。

歐立德在「大教堂內的謀殺」中，以一種類似古代英國的頭韻詩爲格律；這種格律當然完全不是口頭語的旋律。在「家庭團圓」中，他擺脫了頭韻詩的形式，開始接近口頭語；但是，整個說來，還是過份工整。「鷄尾酒會」可說是最口頭語化的詩劇；但是，詩意却不如前兩劇本的濃厚。「私人秘書」的詩律太鬆散了，同時字質也顯得十分貧乏，是最無詩意的劇本。「元老政治家」給了歐立德一個重新加强詩律控制的機會，許多地方都像似「大教堂內的謀殺」，同時字質比較富厚，詩意也濃了。

我以爲歐立德的難題，是將口頭語旋律與韻文合而爲一，而期望產生濃厚的詩意，這種嘗試沒有完全成功。所以，歐立德的劇本只是一連串頗爲功成的實驗，沒有達到莎士比亞以無韻詩足可描寫一切的成熟境界。

GOETHE UND DIE ROMANTIKER

ARNOLD SPRENGER, SVD.

Als der Student August Wilhelm Schlegel (geb. 1767) im Jahre 1789 in Göttingen mit dem Foersterschen Kreise bekannt wurde, geriet er in eine literarische Gesellschaft, in der der Dichter Goethe außerordentlich hoch geschätzt wurde. Vor allem die junge Witwe Caroline Böhmer, Tochter des Orientalisten Michaelis, führte August Wilhelm zum Verständnis Goethescher Werke, so daß er sich schon bald an die Rezension von Arbeiten aus der Feder Goethes heranwagte. Diese Art literarischen Schaffens August Wilhelm Schlegels und seines jungen Bruders Friedrich Wilhelm Schlegel (geb. 1772) war es, die schon bald Goethes Namen neuen Klang verlieh. Das Schlegelsche Brüderpaar, führend in der frühromantischen Bewegung, erschien erst auf der Bühne der literarischen Kritik, als der um zwanzig Jahre ältere Goethe bereits zwei Jahrzehnte lang veröffentlicht und die Gemüter der Literarkritiker bewegt hatte. Bevor wir die Gebrüder Schlegel und andere bedeutende Romantiker in ihrem Verhältnis zu Goethe darstellen, soll kurz die Wirkungsgeschichte Goethes bis zum Auftreten der Frühromantiker in ihren bedeutendsten Tendenzen gestreift werden.

Goetz von Berlichingen ist das erste Werk Goethes, das ihn einer breiteren Öffentlichkeit bekannt machte. Im Juni 1773 wurde das Drama unter dem Titel *Götz von Berlichingen mit der eisernen Hand, ein Schauspiel* veröffentlicht. Noch im gleichen Jahr meldeten sich die ersten kritischen Stimmen. In seiner Arbeit *Das literarische Publikum des jungen Goethe* kommt Alfred Nollau zu dem Ergebnis, daß bis Ende 1775 wenigstens 21 Besprechungen und neun Erwähnungen des *Götz* nachweisbar sind.(1)

Ein Studium dieser frühen Goetz-Kritiken läßt erkennen, daß die Rezensenten von der Genialität des Autors angesprochen zu sein scheinen. Alle stimmen mehr oder weniger in der Auffassung überein, daß von diesem Talent noch Außergewöhnliches erwartet werden könne. In der literar-kritischen Beurteilung scheiden sich

die Geister. Einige treten mit traditionellen Maßstäben an das Werk heran und finden, daß hier gegen unumstößliche Regeln, (gemeint sind die drei Einheiten des Aristoteles) gefehlt wird. Das Drama ist nach ihnen als Bühnenstück unmöglich, mag es auch viele Szenen enthalten, die jeden beeindrucken. Als Beispiel führen wir eine kritische Stimme aus Hamburg an. Die Rezension des *Neuen gelehrten Merkurius* vom 19. August 1773 hebt hervor: "Einheit der Zeit, des Ortes, der Handlung, alle Regeln des Dramas sind hier bey Seite gesetzt worden." Wir hören aber weiter: "Uns hat es gar sehr vergnügt, ob wir gleich nicht glauben, daß es einen großen Einfluß auf den Geschmack der deutschen Schauspiele haben könne und dürfe."(2)

In Deutschland herrscht zu dieser Zeit die klassizistische Kunsttheorie noch weitgehend vor, vor allem im protestantischen Nord- und Mitteldeutschland, in den Städten Leipzig, Berlin und Hamburg, den Hochburgen der Aufklärung.

Daneben deutet sich bereits eine Entwicklung an, die von der klassizistischen Poetik wegführt. Man findet Gefallen an der Buntheit und Lebendigkeit der Gestaltung, an der Darstellung geschichtlicher Begebenheiten. Bezeichnend für diese literarische Einstellung mag der Artikel vom 20. August 1773 in den *Frankfurter Gelehrten Anzeigen* stehen. Dem Dichter wird vom Rezensenten "unsterblicher Dank" zugesichert, daß er sich für das Studium altdeutscher Sitten interessiert habe, man stehe hier auf "ächtem deutschen Grund und Boden." Der Dichter habe die deutschen Helden wieder von den Toten auferweckt. "Für die Szene zwischen Marien und dem vergifteten Weislingen gäben wir ein Dutzend französischer Trauerspiele."(3) Goethes *Götz* traf auf eine Situation, in der künstlerische, soziale und nationale Kräfte im Aufbruch waren.

Die Leiden des jungen Werther, erster und zweiter Teil, erschienen im Jahre 1774. Hatte der *Götz* seinen Autor auf schnellstem Wege in der literarischen Welt bekannt gemacht, so sollte der *Werther* die Auseinandersetzung um Goethes Kunstauffassungen noch bestärken. Auch die frühen Werther-Kritiken zeigen, daß die Genialität des Autors von niemandem in Frage gestellt wird, sie wird sogar

von denen besonders unterstrichen, die den *Werther* als ein gefährliches Werk der Verführung verurteilen. Dennoch werden die künstlerischen Werte des Romans kaum gesehen. Meistens bleibt man beim Genuß sentimentaler Szenen stehen ohne zu der Einsicht zu gelangen, daß der Roman ein brennendes Zeitproblem behandelt. Im allgemeinen steht einer begeisterten Aufnahme bei der Jugend die teilweise sehr scharfe Ablehnung aller jener gegenüber, die in den Auswirkungen der Schrift eine unmittelbare Gefahr für die Sittlichkeit sehen; und weil gerade die Beurteilung dieses Goetheschen Werkes so schnell von der literarischen Ebene zur sittlichen hinüberwechselt, wird die Auseinandersetzung um den *Werther* mit größerer Schärfe geführt.

Diese Auseinandersetzung läßt sich bis in die achtziger Jahre verfolgen. Braun weist etwa hundert Rezensionen und Notizen nach, die bis 1780 veröffentlicht wurden und sich in irgend einer Form mit der Werther-Kritik beschäftigen. Man darf vielleicht sagen, daß kein Werk der deutschen Literatur eine so starke Wirkung ausgeübt hat wie der Goethesche *Werther*, eben weil diese Dichtung aus der Zeit kam und über die Zeit hinausreichte. Falsch wäre es allerdings, wollte man von der literarischen Anerkennung des jungen Goethe auf die zeitgenössische Verbreitung seiner Werke schließen. Goethes *Werther* wurde dem deutschen Publikum vor allem durch eine Fülle seichter Nachahmungen bekannt und schmackhaft gemacht. Einige Beispiele sollen hier aufgeführt werden. Schon die Titel dieser Werke zeigen, welchen weiteren Verlauf die Auseinandersetzung um Goethes Werk nahm. Heinrich Gottfried von Bretschneider schrieb *Eine entsetzliche Mordgeschichte von dem jungen Werther, wie sich derselbe den 21. Dezember durch einen Pistolenschuß ums Leben gebracht* (erschienen in Boxdehude, Berlin, 1776). Von Ernst August Anton von Göchhausen stammt *Das Wertherfieber, ein unvollendetes Familienstück* (erschienen in Weimar, 1776). F. von Goué schuf das Drama *Masuren oder der junge Werther, ein Trauerspiel* (erschienen in Frankfurt und Leipzig, 1776).

Der *Götz* und der *Werther* sind es vor allem, die die literarische Welt Deutschlands während der ersten Schaffensperiode Goethes

bewegen. Die beiden nächst größeren Werke *Clavigo* und *Stella* werden durch sie ein wenig in den Hintergrund gedrängt. Die vielen kleineren Werke der siebziger und achtziger Jahre, ja selbst die *Iphigenie* und der *Egmont* reichen nach Ansicht der Literarkritiker an die beiden ersten Werke nicht heran und erhöhen kaum noch Goethes Ruhm, machen aber verständlich, daß der junge Dichter ein überaus allseitiger und fruchtbarer Schriftsteller ist, von dem man jederzeit mit neuen Werken überrascht werden kann.

Mit seinem Roman *Wilhelm Meisters Lehrjahre*, dessen drei ersten Bände 1795, dessen vierter Band 1796 bei Ungar, Berlin, erschien, erlebt Goethe noch einmal einen Höhepunkt als 'tonangebender Kopf' unter den deutschen Dichtern. Rezensionen erscheinen schon bald, die sich teilweise recht positiv äußern. Verschiedene Rezensenten hatten allerdings einen wertherähnlichen Roman erwartet und sehen sich nun ein wenig enttäuscht: zu wenig Natur, zu viel Kunst in diesem Roman. Die Charaktere seien zu schwach gezeichnet, hätten zu wenig Herz und Gefühl, sie vermöchten nicht die Anziehungskraft eines Werthers auszuüben.—Andere Rezensenten, die glauben, sie verstünden das Werk besser, halten ihm zugute, daß es das Produkt feinsten Beobachtungsgeistes sei, daß es vor den früheren Werken des Dichters alles das voraus habe, was tieferer Blick und reifere Menschenkenntnis nur vermitteln könnten.

Am tiefsten verstanden und am meisten gewürdigt wurde das Werk jedoch von den frühen Romantikern, die den Roman als ihr Vorbild ansahen, weil die Tendenzen der Zeit sich in ihm am reinsten aussprachen. Da die Mitglieder des frühromantischen Kreises eng mit Goethes Persönlichkeit und Wirken verbunden waren, soll nun zunächst auf das Verhältnis der bedeutendsten Frühromantiker zu Goethe eingangen werden.

* * *

Friedrich Schlegels Weg zu Goethe führte durch manches Auf und Ab in der Beurteilung Goethescher Dichtung. Seine Briefe an seinen Bruder August geben einigen Aufschluß darüber. Am vierten Juni schreibt er aus Leipzig:

Als Programmschrift der romantischen Goetheverehrung darf Friedrich Schlegels Goethe-Aufsatz gelten, der in dem Berliner Organ *Deutschland* im Jahre 1796 veröffentlicht wurde. Goethes Poesie wird zur "Morgenröthe ächter Kunst und reiner Schönheit" erklärt.[10] In einem seiner kritischen Fragmente, die er im Jahre 1797 im *Lyseum der schönen Künste*, Berlin, veröffentlichte, meint Friedrich, daß mit einer gehörigen Kritik des Goetheschen *Meister* alles gesagt wäre, worum es jetzt in der Poesie gehe.[11]

Er selbst wagt es dann noch im gleichen Jahre in der Zeitschrift *August Wilhelm und Friedrich Schlegel, Athenaeum*, die von den beiden Brüdern gemeinsam herausgegeben wurde, den *Wilhelm Meister* zu rezensieren.[12] Am 14. Oktober berichtet Caroline—nun bereits die Frau August Wilhelms—an Friedrich, daß Goethe sich August Wilhelm gegenüber lobend über die Rezension ausgesprochen habe.[13] Im *Meister* fand der Rezensent alles verwirklicht, was er und der Romantiker-Kreis als poetisch bezeichneten: die Ahnung, den Traum, das Unbewußte, die Annäherung an das Märchen.

Als Taschenbuch für 1798 kam Oktober 1797 bei Vieweg in Berlin Goethes Epos *Hermann und Dorothea* heraus. August Wilhelm Schlegel verfaßte eine ausführliche und gründliche Besprechung. Was er darin niederschrieb, ist wohl bei weitem das hervorragendste, was in der damaligen Zeit über dieses Werk geschrieben worden ist. In der Rezension, die am 11., 12. und 13. Dezember 1797 in der *Allgemeinen Literatur-Zeitung, Jena und Leipzig*, veröffentlicht wurde, macht August Wilhelm beiläufig eine Bemerkung, die seine hohe Auffassung von Goethes *Wilhelm Meister* wiedergibt. Er glaubt, daß es ein Werk sei, "nach welchem die Nachwelt von der Höhe unserer Bildung einst allzu günstig urteilt." In der Zusammenfassung seiner Ausführungen über *Hermann und Dorothea* heißt es dann:

> Es ist ein in hohem Grade sittliches Gedicht, nicht wegen eines moralischen Zweckes, sondern insofern Sittlichkeit das Element schöner Darstellung ist. In dem Dargestellten überwiegt sittliche Eigentümlichkeit bey weitem die Leidenschaft und diese ist so viel möglich aus sittlichen Quellen abgeleitet.

> Einige Lieder von Goethe...haben die entgegengesetzte Wirkung. Sie tönen mir oft noch vor, und haben eine Zauberkraft. An ein solches Wort haftet sich so viel Erinnerung ehemaligen Entschlusses und Genußes,—so daß es plötzlich Licht in die Finsternis bringt.(4)

Am achten November 1791 nennt er Goethe mit Klopstock, Winkelmann und Kant noch in einem Atemzuge,(5) aber im Spätherbst des nächsten Jahres schreibt er über Goethe:

> Meine Liebe zu ihm ist nicht mehr dieselbe. Der Inbegriff seiner Werke ist der Abdruck seiner eigennützigen kaltgewordenen Seele. Der Werther, Götz, Faust, Iphigenie und einige lyrische Stücke sind der Anfang eines großen Mannes—es ist aber ein Höfling daraus geworden.(6)

Leider wurden auf Bitten August Wilhelms dessen Briefe an Friedrich vernichtet, so daß uns die Antworten August Wilhelms auf seines Bruders Briefe nicht mehr zugänglich sind.

Am elften Oktober 1793 schmeichelt Friedrich seinem Bruder, daß er (August Wilhelm) Kunst besäße, ohne daß die Kunst ihn besäße; seine Lehre sei, daß die Menschheit das höchste und die Kunst nur um ihretwegen vorhanden sei. Schiller und Bürger achteten die Kunst höher als die Natur, "ja selbst der große Goethe ist im Alter zu dieser Selbstvergötterung herabgesunken. Er scheint selbstgefällig seinem Genius zu lauschen..."(7) Gegen Ende desselben Jahres scheint Friedrich sein Urteil über Goethe revidiert zu haben:

> Ich bewundere eigentlich keinen deutschen Dichter als Goethe. Und doch ist er vielleicht nicht gerade durch Übermacht des Genies so unendlich weit über jene beiden erhaben als durch etwas anderes. Etwas, was er doch nur beynahe hat, was allein den Griechischen vorzüglich, den Atheniensischen Dichtern eigenthümlich ist.(8)

Bezeichnenderweise scheint dem Kenner der Antike von dorther das Verständnis für den klassischen Goethe aufzugehen. Am 27. Februar des nächsten Jahres meint er, daß für ihn das Problem der Poesie in der Vereinigung des Wesentlich-Modernen mit dem Wesentlich-Antiken liege. Goethe sei der erste, der sich diesem poetischen Hochziele nähere.—Für Friedrich Schlegel bedeutete in dieser Periode die griechische Kunst wegen ihrer Objektivität das Höchste; Goethe stehe wie kein zweiter dieser Objektivität nahe.(9)

Der Schlußsatz lautet: "Hermann und Dorothea ist ein vollendetes Kunstwerk in großem Stil und zugleich faßlich, herzlich, vaterländisch; ein Buch voll goldner Lehren der Weisheit und Tugend."[14]

Aber das Lob der Schlegels und mit ihnen das ihrer Freunde in Jena sollte nur eine gewisse Zeit dauern. Noch während des ersten Jahrzehntes des 19. Jahrhunderts macht sich eine allmähliche Abkühlung und Gleichgültigkeit vor allem im Verhältnis der Schlegels zu Goethe bemerkbar. Es lassen sich mehrere Gründe dafür finden: persönliche sowohl als auch sachliche. Zwischen Schiller und Friedrich bestanden Differenzen. Als auch August Wilhelm durch seinen Bruder mit in diesen Zwist gezogen wurde, kam es schließlich zum Bruch beider mit Schiller, wodurch selbstverständlich auch das Verhältnis der beiden Brüder zu Goethe belastet wurde. Die Konversion Friedrich Schlegels zum Katholizismus machte schließlich eine weitere enge Zusammenarbeit praktisch unmöglich. Wohl nicht ohne Bitterkeit schreibt Goethe am 20. Oktober 1831 an Zelter: "...so erstickte doch Friedrich Schlegel am Widerkäuen sittlicher und religiöser Absurditäten... deshalb er sich in den Katholizismus flüchtete."[15]

Daß Goethe vielleicht niemals zu einer inneren Annäherung an die Schlegels gekommen ist, legt sein Briefwechsel mit Schiller nahe. Der Beginn des bereits erwähnten Briefes Goethes an Zelter ist ein sehr hartes Urteil über die beiden Brüder, mit denen Goethe doch für ein Jahrzehnt zusammen gearbeitet hatte.

Fast allen Frühromantikern erging es in ihrem Verhältnis zu Goethe ähnlich wie den beiden Brüdern Schlegel.

Im Jahre 1798 schreibt N o v a l i s im *Athenaeum* unter anderem, daß Goethe jetzt der "wahre Statthalter des poetischen Geistes auf Erden" sei. In Todesnähe sagt sich der frühreife Dichter als erster der Romantiker von Goethe los, selbst auch von Goethes *Meister*, der um diese Zeit bei seinen Freunden noch immer als das Musterstück der Poesie galt. Am 23. Februar 1800 schreibt Novalis:

"So viel ich auch aus Meister gelernt habe und noch lerne, so odiös ist doch im Grunde das ganze Buch. Es ist eine Candide gegen die Poesie, ein nobilitierter Roman."[16]

Auch das Verhältnis Tiecks zu Goethe wandelte sich mit der Herausbildung der eigentlich romantischen Theorien. Doch verstand Tieck es besser als die Schlegels, mit Goethe in einem freundschaftlichen Verhältnis zu bleiben und auch dann noch mit ihm zusammenzuarbeiten, als sich die Mehrzahl der Frühromantiker insgeheim oder öffentlich von Goethe losgesagt hatte. Besonders die romantische Übersteigerung des Shakespeare-Kultes durch Tieck war Goethe ein Dorn im Auge. Tatsächlich wandte sich Goethe im Jahre 1815 mit seinem Aufsatz "Shakespeare und kein Ende" gegen diesen Kult und griff damit—wenigstens indirekt—Tieck an. Aber dieser verstand es immer wieder, über das Trennende hinwegzusehen und mit Goethe in Kontakt zu bleiben. So reicht zum Beispiel der Briefwechsel Tieck-Goethe bis zum Jahre 1829 und gerade die letzten Briefe atmen betonte Herzlichkeit und gegenseitige Anerkennung.[17]

Nachdem Goethe in seinem letzten Brief an Tieck (9. November 1829) kurz dessen Anteilnahme an seinem Werke gewürdigt und für die unter Tiecks Regie inszenierte Aufführung des Faust in Dresden gedankt hat, schließt er mit diesen Worten:

> Es möge fernerhin ein so schönes und eigenes Verhältnis, so früh gestaltet und so viele Jahre hindurch erhalten und bewährt, mich auch noch meine übrigen Lebenstage begleiten.[18]

In seinem letzten Brief an Goethe (24. September 1829) führt Tieck den Überbringer des "Blattes" ein, dem es auf diese Weise ermöglicht wurde, den Weimarer Dichter zu sehen. Es heißt dort:

> ...und weil ich glaube und hoffe, daß der Anblick und die kürzeste Gegenwart des großen Mannes, der mich seit meiner Kindheit begeistert hat, auch für ihn das schönste Andenken sein Leben hindurch bleiben und ihn zum Guten und Edlen ermuntern muß.[19]

In den bisher geschilderten Verhältnissen Goethes zu den Romantikern ließ sich wohl nirgends der Charakter einer wirklich echten und dauernden Freundschaft festellen. Aber mit einem bedeutenden Glied des Jena-Kreises fühlte sich Goethe aufrichtig verbunden: mit Schelling.

Was war es, was diese beiden Männer zusammenführte und was war es vor allem, was ihre Freundschaft aufrecht erhielt; als

die zwischen Goethe und den übrigen Romantikern erkaltete oder gar in Feindschaft umschlug? Einerseits handelte es sich hier um geistige Verwandschaft. Goethe spürte in Schelling etwas von seinem Geiste. So schreibt er im September 1800 an Schelling:

> Seitdem ich mich von der hergebrachten Naturforschung losreißen und, wie eine Monade auf sich selbst zurückgewiesen, in den geistigen Regionen der Wissenschaft umherschweben mußte, habe ich selten hier oder dorthin einen Zug verspürt; zu ihrer Lehre ist er entschieden.(20)

Der zeitweilig sehr rege Briefwechsel gibt Aufschluß darüber, wie sehr Goethe bemüht war, in das Denken Schellings einzudringen.

Was für die Dauer des Freundschaftsbundes zwischen Goethe und Schelling von besonderer Bedeutung werden sollte, ist die Tatsache, daß Schelling jenen Wegen auswich, auf denen die übrigen Romantiker von Goethe weggeführt wurden. So gab er seiner Transzendentalphilosophie niemals die religiöse, erst recht nicht die katholische Note. Er protestierte geradezu gegen den "religiösen Paroxysmus der Tieck und Novalis."(21) In seinem "Epikurischen Glaubensbekenntnis Heinz Widerporstens" behauptete Schelling, daß nur das wirklich und wahr sei, was man mit Händen betasten könne. Er halte nichts vom Unsichtbaren, die Materie sei das einzig Wahre, „unser aller Schutz und Rather, aller Dinge rechter Vater, alles Denkens Element, alles Wesens Anfang und End."(22) Also, ein deutliches Bekenntnis zur sinnlich greifbaren Natur, eine völlige Absage an jedweden übernatürlichen Gedanken, vor allem an den Katholizismus. Aber sehr nahe kommt Schelling hier dem Credo des *Faust* in der sogenannten "Katechisationsszene" der Gretchentragödie.

Auch dadurch unterscheidet sich Schelling von den übrigen Romantikern und berührt sich wiederum mit Goethe, daß er zeitlebens der Antike treublieb. So setzt er sich beispielsweise im Jahre 1818 in seinem Brief an Goethe (31. Mai) für die von letzterem geförderten antikisierenden Künstler in München ein, während er mit Bezug auf die deutschen Künstler in Rom (Nazarener) von "Pfäffisch tückischen Kniffen" spricht.(23)

Wenn über das Verhältnis Schellings zu Goethe gesprochen wird, muß auch C a r o l i n e S c h l e g e l, später die Frau Schel-

lings, erwähnt werden. Daß sie am Goethebild der Schlegels, vor allem August Schlegels, mitgeformt hat, wurde schon erwähnt. Wer in der Verbindung Carolines mit Schelling, die mit Hilfe Goethes zustande kam, das stärkere Bindeglied zu Goethe war, läßt sich schwer beurteilen. Jedenfalls hat ihre beiderseitige Absage an die späteren romantischen Entwicklungen den Freundschaftsbund mit Goethe begünstigt, während andererseits der starke Einfluß Goethes die beiden mehr und mehr den übrigen Romantikern entfremdete.—Caroline war solange die Mitte der frühromantischen Gesellschaft gewesen, solange Goethe als der erste Dichter des Zeitalters gefeiert worden war. Mit der Auflösung des Jena-Kreises und der Abkehr der bedeutendsten Frühromantiker von Goethe ist ihre Bedeutung für die Mitglieder dieses frühen Kreises dahin; von jetzt ab gehört ihre ganze Kraft Schelling, ihre Verehrung aber weiterhin Goethe.

* * *

Die älteren Romantiker bilden eine Gruppe, die durch Bande der Freundschaft verbunden ist. In den Jahren von 1794 bis 1804 helfen sie gemeinsam am Ruhm Goethes mitbauen; durch sie wird Goethe kurz vor dem Ende des 18. Jahrhunderts zum ersten deutschen Dichter der Epoche erklärt. Den jüngeren Romantikern steht Goethe bereits als anerkannte Dichtergröße gegenüber, des Dichters großer Einfluß auf die literarische Welt kann nicht mehr geleugnet werden. Während noch die älteren Romantiker in ein mehr freundschaftliches Verhältnis zu dem fünfzig-jährigen Goethe treten konnten, bleibt den jüngeren im besten Falle nur das Lehrer-Schüler-, bzw. Vater-Sohn Verhältnis. Der Briefwechsel dieser jüngeren Romantiker mit Goethe zeigt, daß es nur Bettina von Arnim, Zacharias Werner und vielleicht auch Ludwig von Arnim waren, die dem Weimarer Dichter menschlich nahestanden.[24]

Zacharias Werner bemüht sich immer wieder, bei Goethe ein anerkennendes Wort über seine eigenen Dichtungen zu finden. Mit geradezu blasphemischen Ausdrücken preist Werner den "Helios" Goethe nach seinem Besuch in Weimar:

> ...—nicht das, was er mir in die Hand steckte—(wiewohl es weit, weit über mein Verdienst und Würdigkeit)—war der Segen, aber dies Anfassen bey dem Haupte war es—ein heydnischer Segen, eine Kunstweihe durch den ersten Meister...

und er will sein ganzes Gefühl ausströmen lassen gegen den, dem er keine anderen Namen zu geben weiß als die biblischen "Krafft, Rath, Ewigvater, Friedensfürst"[25] Goethe redet ihn dafür in seinen Antwortbriefen bisweilen mit "Lieber Werner" an. Daß Goethe auf die Konversion Werners zum Katholizismus (1811), mehr noch auf dessen Priesterweihe (1814) mit Spott und Bitterkeit reagierte und eine weitere Zusammenarbeit ablehnte, versteht sich von selbst. Wenn Goethe aber in seinem Brief vom siebten September 1821 Zauper gegenüber äußert, daß man Werke Werners, Grillparzers und einiger anderer nicht ohne Nutzen studiere, dann erkennt er trotz weltanschaulicher Differenzen Werners dramatisches Talent an.[26]

Eine außerordentliche Verehrung wurde Goethe von Bettina, der Schwester Clemens Brentanos und der Gattin Ludwig von Arnims, entgegengebracht. Der verhältnismäßig umfangreiche Briefwechsel zwischen Bettina und Goethe zeigt einmal den Enthusiasmus Bettinas für Goethe, zum andern auch, wie sehr Goethe von Bettina angesprochen und beeinflußt worden ist.[27] Als nach einer Skandalszene zwischen Bettina und Christiana Goethe unmißverständlich für seine Frau eintrat,[28] brach der Briefwechsel zwischen Goethe und Bettina zwar für mehr als zehn Jahre ab, ihre Begeisterung für den Dichter hörte damit aber nicht auf. Im Jahre 1824 arrangierte sie ein neues Treffen mit Goethe. Vom Juni des folgenden Jahres liegt ein Brief an ihn vor, der uns übertrieben erscheint, dennoch beweist, daß Goethes Bild auch während der Zeit beiderseitigen Schweigens in Bettina lebendig geblieben war. So heißt es z. B.:

> Ich konnte Dir nicht schreiben, seit ich Dich gesehen! Die Seele ruhte so lange in Deiner letzten Umarmung, ich konnte, ich wollte sie nicht wecken zu anderem Denken; Du und Du mit liebender Begegniß:—könnte ich mit Dir sein von Ewigkeit zu Ewigkeit...[29]

Bettinas schönstes Goethe-Vermächtnis ist ihr Werk *Goethes Briefwechsel mit einem Kinde.*[30]

Die Verehrung, die der Gatte Bettinas, Achim von Arnim, Goethe entgegenbrachte, äußerte sich weniger enthusiastisch, war aber doch aufrichtig. Der erste literarische Kontakt mit Goethe durch *Des Knaben Wunderhorn,* das von letzterem günstig rezensiert wurde, war vielversprechend.[31] Das intime Verhältnis seiner Freundin und späteren Gattin zu Goethe brachte auch ihn selbst dem geschätzten Dichter näher. In seinem Briefwechsel mit Goethe spricht sich eine ehrliche Hochachtung vor diesem aus.[32] Auch nachdem sich Goethe über die *Zeitung für Einsiedler* wening ermutigend ausgesprochen hatte und sich mehr und mehr gegen die altdeutschen Bestrebungen der Romantiker abzuschließen begann, blieb Achims Verhältnis zu Goethe unverändert.[33] Selbst nach dem schon erwähnten Skandal in Weimar und Goethes schroffer Haltung Bettina gegenüber wird des Dichters Ehre nicht angetastet. Jm Brief vom 28. Oktober 1811 an Riemer schreibt Achim über Goethe:

> Gern hätte ich ihn am Hofe noch ein paar Worte zum Abschiede gesagt, er vermied es aber, ungeachtet er mich freundlich grüßte, will er uns gern vergessen, so stören Sie ihn nicht, spricht er einmal wieder mit Antheil von uns, so begrüßen Sie ihn recht herzlich von uns.[34]

Der nächste Brief Achims an Riemer vom Januar 1812 besagt ganz eindeutig, daß trotz allem das Goethebild in Achim unverändert geblieben ist. Für einige Tage der Kränkung, so meint er, habe er mehrere schöne Stunden in seinem Leben gewonnen; zudem gehörten Goethes Schriften ihm so gut wie der ganzen Welt, ob Goethe sie ihm nun gönne oder nicht.[35]

Die beiden Romantiker Achim von Arnim und Clemens Brentano, die nicht nur durch Bande der Freundschaft und Verwandschaft, sondern auch durch verschiedene gemeinsame Arbeiten (z. B. Herausgabe des *Des Knaben Wunderhorn* und der *Zeitung für Einsiedler*) zusammengehalten wurden, unterschieden sich kaum in ihrer Beurteilung Goethes. Allerdings kam Brentano Goethe persönlich nicht so nahe wie seine Schwester und sein

späterer Schwager, was er selbst Goethe gegenüber in seinem Brief vom Februar 1809 gesteht:

> ...und so werde ich durch Schwester und Freund auch Ihrer Güte theilhaftig, die ich persönlich noch nicht zu verdienen, die Gelegenheit hatte.(36)

Am elften März 1815 redet er Goethe mit "unser aller Herzensfreund" an und versichert ihn seiner "innigsten Verehrung".(37)

Johann Joseph Görres, ein guter Freund und Mitarbeiter Achims und Brentanos, hatte so gut wie kein persönliches Verhältnis zu Goethe. Ein Briefwechsel zwischen beiden existiert nicht. Zuweilen stuft man diesen Romantiker sogar in die Stufe der Goethe-Gegner ein.

Im Jahre 1804 und 1805 veröffentlichte Görres in der Zeitschrift *Aurora* zwei Urteile über Goethe. Darin grenzt er verschiedene Stil- und Schaffensperioden Goethes ab. Einmal will er an Goethes Werken die "drei Perioden der griechischen" Plastik nachweisen,(38) das andere mal vergleicht er sie mit Landschafts- und Stimmungsbildern der verschiedenen Jahreszeiten.(39)

Im ersten Falle ist ihm die *Eugenie* Goethes kein Marmorbild mehr, sondern aus "Edelmetall" gegossen. Sie repräsentiert die "Periode des eleganten Stils" und erinnert dabei in ihrer "Correctheit" und "sublimierten Abgezogenheit" an die "bestgehassten" Werke der französischen Bühne. Im zweiten Bild machen ihn die "nebelichten Regentage" des *Wilhelm Meister* und die da "wandelnden Gestalten, in sich zusammengedrückt, laut- und tonlos", frostig erschauern. Da ist zwar eine Welt gezeichnet, aber "die Schattenwelt des Hades, wo die Helden traurig und verdrießlich gegeneinander sich bewegen." Die "arme Mignon" hat der Dichter unbarmherzig aus dem Süden gerissen und sie "unter diesen kalten Himmel hingeworfen".—Das Werk, das den Frühromantikern auch um diese Zeit noch immer teuer war, wird von Görres völlig verkannt. Auf die Kunst der Darstellung geht er garnicht ein.

Es wäre aber falsch, zu behaupten, Görres habe überhaupt kein Verständnis für Goethesche Dichtung gehabt. Denn vom *Werther* sagt er beispielsweise:

> ...Eunomina hat Werthern Leiden hineingeflossen, da blüht der Frühling; ein warmer, reicher, üppiger Mai steht in dem dichtenden Gemüte; ein heiterer, klarer Himmel ist in der Höhe ausgespannt, und in dem tiefen, unergründlichen Königsblau spiegelt sich die Unendlichkeit des Gefühls.

Und von Goethes Gesamtwerk heißt es, daß sich dort die "Horen einen schönen Kranz gewunden" hätten und daß sich der "Zyklus in dem Gemüte des Dichters" lieblich in dem Kranze abgebildet habe.[39]

Wenn man bedenkt, daß Görres in seinen Anfängen ein begeisterter Anhänger der französischen Revolution war, später in seinem *Rheinischen Merkur* wirkungsvoll gegen das Machtstreben Napoleons ankämpfte und sich schließlich dann noch eng an die katholische Kirche anschloß, dann kann man verstehen, daß sich weder Goethe für ihn besonders interessierte noch er selbst allzu großen Wert auf das Verständnis Goethescher Schriften legte. Görres dürfte daher derjenige unter den Romantikern sein, der Goethe am fernsten stand.

* * *

Rückblickend können wir sagen, daß Goethe sich einen Namen in der literarisch interessierten Welt Deutschlands gemacht hatte, noch ehe die Romantiker auf den Plan traten. Die beiden frühen Werke *Götz* und *Werther* und die durch sie hervorgerufenen Nachahmungen trugen den Namen des Dichters in alle Winkel Deutschlands. Dennoch war wohl erst mit den Beiträgen der frühen Romantiker, vor allem mit Friedrich Schlegels Aufsatz "Über Goethes Meister"—"diesem schlechthin neuen und einzigen Buche, welches man nur aus sich selbst verstehen kann,"[40] ferner einigen Fragmenten im *Athenaeum*, seinem Wiener Vortragszyklus von 1812 u. a. die allgemeine Anerkennung des Goetheschen Werkes gesichert. Es ist das Verdienst der Romantiker, den Ruf Goethes als überragenden Dichter Deutschlands kritisch fundiert zu haben.

ANMERKUNGEN

(1) Weimar: 1935. Die meisten dieser Besprechungen findet man bei J. W. Braun, *Goethe im Urteil seiner Zeitgenossen*, 3 Bde., Berlin: 1883-85, abgedruckt.

(2) J. W. Braun a. a. O., Bd. I, S. 4f.

(3) J. W. Braun a. a. O., Bd. I, S. 5f.

(4) Oskar F. Walzel, *Friedrich Schlegels Briefe an seinen Bruder Wilhelm* (Berlin: 1890), S. 3.

(5) Walzel a. a. O., S. 22ff.

(6) Walzel a. a. O., S. 59ff.

(7) Walzel a. a. O., S. 121.

(8) Walzel a. a. O., S. 151.

(9) Walzel a. a. O., S. 170.

(10) Braun a. a. O., II, S. 235f.

(11) Braun a. a. O., Bd. II, S. 266ff.

(12) Braun a. a. O., Bd. II, S. 284ff.

(13) *Caroline. Briefe an Ihre Geschwister, ihre Tochter Auguste, die Familie Gotter, F. L. W. Meyer, A. W. und Fr. Schlegel, J. Schelling und andere*, herausgegeben von Georg Waitz, (2 Bde.; Leipzig: 1871), I, 217f.

(14) Oskar Fambach, *Goethe und seine Kritiker* (Düsseldorf: 1953), S. 34ff.

(15) Gerhard Fricke, *Briefwechsel zwischen Goethe und Zelter* (Nürnberg: 1949), S. 206ff.

(16) *Novalis Schriften*, herausgegeben von Ludwig Tieck und Fr. Schlegel (5. Aufl.; Berlin: 1837), II, S. 182ff.

(17) Karl Schüddekopf und Oskar Walzel, *Goethe und die Romantiker* (2 Bde.; Weimar: 1898-99), I, 290-312 =Schriften der Goethe-Gesellschaft, Bd. XIII.

(18) Schüddekopf und Walzel a. a. O., I, 311f.

(19) Schüddekopf und Walzel a. a. O., I, 312.

(20) Schüddekopf und Walzel a. a. O., I, 211.

(21) Vergl. Rudolf Haym, *Die romantische Schule* (Berlin: 1870), S. 552.

(22) Vergl. *Aus Schellings Leben. In Briefen*, herausgegeben von G. L. Plitt (Leipzig: 1869), I, 282ff. Siehe auch *Satiren und Parodien*, bearbeitet von Andreas Müller (Leipzig: 1935), S. 177ff. =Deutsche Literatur in Entwicklungsreihen. Reihe Romantik, Bd. II.

(23) Schüddekopf und Walzel a. a. O., I, 266ff.

(24) Schüddekopf und Walzel a. a. O., II. =Schriften der Goethe-Gesellschaft, Bd. XIV.

(25) Schüddekopf und Walzel a. a. O., II, 4f.

(25) *Goethes Briefwechsel mit Joseph Sebastian Grüner und Joseph Stanislaus Zauper*, herausgegeben von August Sauer (Prag: 1917), S. 152. =Bibliothek deutscher Schriftsteller aus Böhmen, Bd. XVII.

(27) Schüddekopf und Walzel a. a. O., II, 159-97.

(28) Vergl. Brief Achims an Riemer (Ende September 1811). In: Schüddekopf und Walzel a. a. O., II, 276f.

(29) Schüddekopf und Walzel a. a. O., II, 184.

(30) Bettina von Arnim, *Goethes Briefwechsel mit einem Kinde. Seinem Denkmal* (3 Bde.; Berlin: 1835).
(31) Schüddekopf und Walzel a. a. O., II., 95f.
(32) Schüddekopf und Walzel a. a. O., II., 83-158.
(33) Vergl. Goethes Brief an Bettina vom 22. 6. 1808. In: Schüddekopf und Walzel a. a. O., II, 170.
(34) Schüddekopf und Walzel a. a. O., II, 277.
(35) Schüddekopf und Walzel a. a. O., II, 279.
(36) Schüddekopf und Walzel a. a. O., II, 78.
(37) Schüddekopf und Walzel a. a. O., II, 82.
(38) Joseph Görres, "Korruskationen," *Aurora*, XXX (1805), S. 119. Wiederabgedruckt in Joseph Görres, *Gesammelte Schriften*, herausgegeben im Auftrage der Goethe-Gesellschaft von Wilhelm Schellberg, Bd. 3 herausgegeben von Günter Müller (Köln: 1926), III, 119.
(39) Joseph Görres, "Korruskationen," *Aurora*, LXXXXVI (1804), Vergl. *Gesammelte Schriften* a. a. O., III, 85f.
(40) In: *Athenaeum*, Bd. I, 2. Stück (1798), S. 147ff. Wiederabgedruckt in: Friedrich Schlegel, *Seine prosaischen Jugendschriften*, herausgegeben von Jakob Minor (Wien: 1882), II, 165-182.

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摘　　要

在浪漫主義者興起之先，歌德已聞名了文學趣味的德國文壇。尤其是早期"Götz"和"Werther"二作品，以及由於它而導致的倣效，使得這位青年詩人很快的聞名了德國。文學批抨多不斷從事於歌德的著作。最初與這位威瑪（Weimar）詩人密切合作十餘年（大約1795-1810）的早期浪漫派文學界的領導作家們，以及其中數位與他結有情誼關係的作家們，對歌德的思想和藝術創作得到了深刻的了解。他們樹立的優異的文學批抨鞏固了歌德作品普遍而永存的體認。我們研究浪漫主義者與歌德的關係，其中文學批抨較不注重，但提供了歌德與當時專崇他爲詩人的人們私自關係的有趣的了解。

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