## Bodies (Picasso and the Invention of Cubism). Pepe Karmel

Picasso's paintings of summer 1910, the figure dissolves into an arrangement of freefloating lines and planes. As Kahnweiler wrote, this was the "decisive advance which set Cubism free from the language previously used by painting." Traditional painting had represented bodies and objects "as contained by their own surfaces, viz., the skin." Picasso's revolutionary innovation was to pierce this "closed form," so that the body opened into the space around it, while space flowed into and through the body. In hindsight, it is possible to identify important stages on the path to open form, but it is important to remember that Picasso had no way of knowing which ideas pointed "forward" and which did not. Between 1900 and 1910, he experimented with a staggering variety of styles. To trace the path that led to Cubism therefore requires that the way be picked slowly and carefully through a complicated land scape. From 1901 through 1906, Picasso can be observed mostly trying to come to grips with Parisian modernism - trying, in other words, to overcome the limitations of his provincial education. From 1907 through 1909, he was focusing more clearly on the opposition between sculptural and decorative approaches to the human figure. But even in these years, when Picasso's work is conventionally described as "Cubist," there was no clear direction to his development. He devoted much time and energy to projects which seem in retrospect like splendid dead ends.

During this period, Picasso's experiments with different kinds of figuration ran parallel to his experiments with different kinds of projective space. Finally, in 1910, the two lines of investigation were brought together - and the result was open form. But there was nothing pre-ordained about it. There are no large general forces that can be invoked to explain it. This makes it all the harder to understand.

## Against Impressionism

Three decades before Picasso arrived in Paris, the Impressionists had revolutionized painting by attempting to work in a manner corresponding to the latest scientific understanding of vision, which argued that "pure" optical sensation offered nothing more than a field of flat color patches. Trying to paint the optical field as a whole, an artist such as Monet was only secondarily concerned with the particular things found within it. Well past the turn of the century, this remained the defining idea of much avant-garde painting, especially that of Matisse and the Fauves.

Picasso experimented with Impressionist color. But he seems to have been completely indifferent to the idea that the goal of painting was to transcribe the experience of the optical field as a whole. On the contrary, he remained deeply committed to representing particular things. Picasso's academic training oriented him toward an almost exclusive focus on the human. He then graduated to an "avant-garde" scene almost equally out of touch with the truly progressive art of the late 1890s. Instead, Barcelona modernismo was the local variant of the pan-European, decorative "Modern Style".

The studied poses, decorative colors, and literary subjects of Picasso's early paintings were compounded from Aubrey Beardsley and Maurice Denis. In his work of the Blue

Period, Picasso defined a new, sculptural style that corresponded nonetheless to the empiricist theory dividing perception between optical and tactile sensations. Where the Impressionists had tried to achieve a purely "optical" style, Picasso opted instead for a purely "tactile" style of strong contours, massive three-dimensional forms, and monochrome coloring.

One of the attractions for Picasso of this new sculptural style was that it allowed him to continue to focus on the subject matter that interested him most, the human body. This preoccupation played a decisive role in Picasso's response to Cézanne. While Matisse studied Cezanne's paintings of female bathers, with multiple figures integrated into a complex composition, Picasso focused his attention on Cezanne's Large Bather of 1885, with its isolated, sculptural figure. What Picasso gleaned from Cézanne was the idea of minimizing the internal contours of the body, and communicating its sculptural mass primarily by the inflection of its silhouette. This simplification of form was also encouraged by Picasso's study of several Hellenistic heads from Spain that had recently gone on display at the Louvre. Their mask-like faces were often imitated in a series of 1906 paintings, culminating in the large canvas Two Nudes. The bodies here were given a stronger sense of sculptural presence by the simple expedient of making them heftier.

## Decorative vs. Sculptural Form, 1907

By the end of 1906, then, Picasso seemed firmly committed to a sculptural depiction of the human figure. The decorative elements of his earlier painting had been completely banished. Accordingly, in winter 1906—07, when he began planning the composition that became the Demoiselles d'Avignon, it was cast in the sculptural mode of the Two Nudes. The banished elements returned, however, in his studies of spring and summer 1907, setting off a long struggle between sculptural form and decorative design. This struggle continued, unabated, through the course of Picasso's work on the Three Women of spring 1908, and on into his varied experiments of later 1908 and 1909. It is worth examining Picasso's studies for the Demoiselles d 'Avignon in painstaking detail, because some of the formal ideas explored in them provided the starting point for the treatment of the figure in the finished version of the Three Women. It is only a slight exaggeration to say that the faceted, "crystalline" Cubism of 1908—09 derived from ideas that Picasso considered —and rejected— in the course of his work on the Demoiselles.

As seen in the previous chapter, the overall composition of the Demoiselles seems to have evolved from a series of figure studies done as postscripts to the Two Nudes. Although the face of the left-hand figure in the Two Nudes was drawn with razor-sharp clarity, the massive bodies of the figures remained somewhat vague in structure. Picasso seems in his winter 1906—07 drawings to be looking for a way to articulate the structure of the body as clearly as the face. Returning to the academic anatomy of his youth, he marks off the divisions of the pectorals and deltoids, the gluteus médius, the thigh, the kneecap, and the calf, as if his subject were a flayed figure. The abdomen is inscribed within a diamond, and divided by a cross.

The immediate impetus for this delineation of musculature may have been a visit to the Louvre, where Picasso could have studied the similar treatment of anatomy in a superb Ionian torso or in classical vase paintings. Applying this masculine anatomy to his female figures, he created a powerfully androgynous image of the human body, which served as the stock body type of the early sketches for the Demoiselles.

At some point in early 1907, however, Picasso rejected this mode of figuration, probably because it seemed too naturalistic, compared with the bold distortions of his chief rival, Matisse. Under pressure to produce a more radical style, Picasso abandoned classical anatomy and redrew his figures in a new vocabulary of flat, geometric shapes. The revised figures seem strikingly "modern." However, they may also derive from an antique source, specifically an eighth-century krater in the Greek galleries of the Louvre. The silhouetted black figures on this krater, arranged in a frieze across the upper register, are drawn as flat silhouettes, with triangular torsos (seen frontally) perched atop curved hips (seen in profile). The figure in Picasso's notebook sketch is drawn with a similar combination of forms, although here both torso and hips are seen from the front. In another version, the triangle of the torso is combined with a diamond shape enclosing the muscles of the abdomen, as in his early "classical" sketches.

The contrasts between geometric shapes in these drawings recall one of Picasso's later comments about Cézanne: "Around 1906, Cézanne's influence gradually flooded everything, and the knowledge of composition, of the polarity of forms and of the rhythm of forms was open to all. I realized that painting had an intrinsic value, detached from any actual portrayal of objects . . ." The idea of decoration was very much in the air at this time, and the two qualities emphasized by Picasso - "polarity" and "rhythm" — would have been understood specifically as decorative qualities. In Blanc's Grammar of the Decorative Arts, rhythmic repetition is described as the fundamental principle of decoration. Repetition is then combined with its opposite, variety, to yield the secondary principle of alternation. "Two contrasting things, far from disrupting unity, will serve on the contrary to affirm it energetically," Blanc had written.

From this point of view, the formal vocabulary of the revised studies for the Demoiselles can be understood as a decorative style based on oppositions among basic geometric shapes. Within a single figure, Picasso contrasted the rectangle of the raised arms, the triangle of the torso, and the elliptical curve of the hips. A few years later, Fernand Léger adopted the "contrast of forms" as the key principle of his own version of Cubism. In spring 1907, however, Picasso's new style of geometric shapes coexisted uneasily with the stage space of his original studies for the Demoiselles. As individual figures were transformed from three-dimensional bodies into flattened silhouettes, the composition as a whole had to be reorganized as a unified two-dimensional pattern. Picassos first attempts at reworking the composition in his new "flattened" style appear in a May 1907 sketchbook. The poses of the figures had in turn to be adjusted to conform to the flatness of the revised composition. For instance, the crossed leg of the seated figure was redrawn so that it descended in the same plane as the other leg.

The contrast of rectangular, triangular, and curvilinear forms —which had worked successfully within a single figure —presented another problem. Once the composition

as a whole had been aligned around the armature of an under lying X or V (as discussed in the previous chapter), the squared-off arms of the central figure stood out as a foreign element. In the finished canvas, Picasso redrew the arms of this figure as curved lozenges that rhymed with the diagonals around them. Similarly, he raised one of the arms of the seated figure at left to align with the V of the pictures armature.

The "rhythm" of the forms thus triumphed over their "polarity." The drawing of the finished picture is dominated by a single unit: an almond-shaped lozenge with pointed ends, much like the traditional mandorla found on Gothic façades. Almost every form in the picture is a variant of the same shape. Large almonds indicate thighs, small ones arms. Even the curving curtain folds seem like sections of over lapping almonds. The triangular torsos, surviving from the earlier studies, and a few diamond-shaped breasts provide an understated contrast to the curved forms that surround them. Although the poses of the demoiselles are in fact quite varied, the concatenation of flat, curved shapes gives the impression that all five are seen frontally or in profile, rein forcing the archaic quality of their anatomy.

If the Demoiselles had remained as it must have looked when first committed to canvas, with its clean outlines and its decorative color scheme of pink, brown, and blue, it would probably not have provoked the negative reactions that it did. Its flat colors and curved contours were no more outrageous than those of Matisses Young Sailor, painted in the second half of 1906; and Picasso's grouping of nudes had been anticipated in pictures like Derains The Dance of 1906, with its arabesque of decorative figures. However, Picasso himself seems to have been dissatisfied with the picture, and continued to revise it through the spring and summer of 1907.

In abandoning the naturalistic style of his early studies for the picture, he had given up the descriptive power of classical anatomy, which had allowed him create an image of the body charged with physicality and sexuality. In contrast, the simplified, "archaic" forms of the revised composition tended to dematerialize and desexualize the image of the body. This palpable loss provoked Picasso to seek new ways of representing the body as a three-dimensional form. He wanted to reassert the power of sculptural form without giving up the pictorial coherence of his new decorative style.

In a series of spring—summer 1907 drawings, he developed a new, striated style, using hatch marks aligned in long rows to indicate surfaces turning in space. The culmination of these experiments was a major canvas, Nude with Drapery, in which the hatch marks functioned simultaneously as decorative and as sculptural elements. Picasso may have contemplated reworking the Demoiselles as a whole in the style of the Nude with Drapery. Indeed, Kahnweiler in 1916 described the Demoiselles as if this had happened, writing that Picasso "applied the colors in thread-like fashion to serve as lines of direction, and to build up, in conjunction with the drawing, the plastic effect." In fact, more of the picture was at one moment covered with hatch marks, but some of these were overpainted with flat areas of color; in the end, striations appeared only on the faces of the two right-most figures. If the entire canvas had been reworked in this fashion, it might have found a more appreciative audience. The Nude with Drapery, for instance, was quickly acquired by the Steins, and later by Sergei Shchukin. The partial revisions led many early viewers to dismiss the Demoiselles as an "unfinished" work. In

any case, Picasso himself soon abandoned the technique of rhythmic striations, instead pursuing other means to the same goal.

## Faceting

Hatching transformed the appearance of the Nude with Drapery but the underlying composition was built up from the same "almond" module found in the Demoiselles. In his preparatory studies, however, Picasso had experimented with grouping muscles and bones into bulging, pod-like masses that proposed a new, three-dimensional module for the figure. Strikingly unattractive, these rubbery figures were fertile with implications for the future. As he reworked them, Picasso began, step by step, to evolve a new system of articulations, derived from classical anatomy but with its own structural logic. The gluteus maximus was set off from the gluteus médius, establishing two small forms that contrasted with the larger pods of the thigh and abdomen. As the series progressed, the decorative principle of polarity reasserted itself: the smaller elements of breasts, buttocks, and knees became increasingly angular, so that they stood out from the curved forms that surrounded them.

In retrospect, this introduction of angular geometric forms appears as a crucial step toward Cubism. It was not altogether without precedent in Picasso's work. He had used a kind of geometric shorthand to summarize the anatomical divisions of the body in his "classical" sketches of late 1906 and again in his first experiments with "archaic" imagery. Here, the intersection between the "real" diamond of the abdomen and the "imaginary" triangle of the torso created a second, smaller diamond that corresponded to no actual anatomical feature but was, rather, a by-product of the system of geometric representation. In spring 1907, Picasso returned to the idea of inscribing geometric forms on a naturalistic figure. The overlap of diamond-shaped abdomen and triangular torso was now repeated within a larger series of overlapping diamonds. One diamond extended from the top of the head to the navel; another from the neck to the groin; a third from the middle of the abdomen to the knees; and a fourth from the knees to the feet. This experiment, which has no immediate sequel in Picasso's work, seems to have been motivated by a kind of parodie logic.

Geometric proportion was the ghost in the machine of classical anatomy. At bottom, the rules for the representa tion of the ideal body were arbitrary and contingent: a set of proportions derived from antiquity and modified by modern taste. But the attempt to define these rules geo metrically gave them a semblance of objective justification. The sensual beauty of the visible body, it could be argued, corresponded to the ideal beauty of the Platonic forms hidden beneath the skin.

Picasso's diagram echoes and exaggerates academic procedures for using geometry to define body types. In a contemporary text on artistic anatomy, for instance, a discussion of different forms of breast found in ancient art begins with the type "set on the thorax like a cone, which, if cut through its axis, would exhibit an angle of 90° or more." Such breasts are commonly found only in young girls, the author comments; as the force of gravity begins to make itself felt, "the lower portion of the former conical surface grows more convex and rounded," arriving finally at the form of breast found in the Venus de Milo. The nearconical breast in the accompanying diagram is precisely the

kind of firm, high breast that appears in Picassos Two Nudes and in Maillol's contemporary sculptures. The 90o angle inscribed within it justifies the choice of body type.

In another handbook of the period, the angle of the facial plane is calculated by measuring the intersection between a horizontal line and a diagonal line drawn from the nose to the brow. This type of measurement, invented by an eighteenth-century anthropologist to distinguish the facial types of different races, became a standard part of art education. Picasso himself drew a similar diagram for one of his student examinations at the School of Fine Arts in Coruña. Here too, geometry serves to justify the ideal forms of classical anatomy. The larger the angle, the "higher" the race. A "Greek" nose, descending in a straight line from brow to tip, and forming a 900 angle with the horizontal, would in theory represent the the highest point of racial evolution. Empirically, of course, it would look rather odd.

Picasso's "diamond" sketch of spring 1907 represents a kind of reductio ad absurdum of such academic devices, almost completely obscuring the natural figure behind an elaborate geometric scaffolding. More often, Picasso used geometric shapes sparingly, as a counterpoint to the relatively organic forms such as almond or pod. In a drawing of a nude with raised arms —a variation on the central figure of the Demoiselles — breasts, knees, and gluteus médius are depicted by sharp angles, in contrast to the gentler curves of the head, arms, abdomen, and thighs. In another version of this figure, the curvilinear forms of the abdomen, thighs, and calves are subdivided into sharp-edged planes, bringing them closer in character to the angular forms of the knees and gluteus.

It is this combination of hard-edged geometric shapes with an underlying anatomy of bulging, pod-like forms that produces the characteristic "faceting" of early Cubism. Picasso seems first to have experimented with this mixed angular and curvilinear style in late spring 1907, when he was thinking about revising the canvas of the Demoiselles to make it look more three-dimensional. He returned to it in early 1908, when he confronted the same tension between sculptural and decorative approaches in his work on the Three Women.

As seen earlier, the original studies for the Three Women were executed in a "decorative" style of color planes with interlacing contours. It was only after enlarging the composition onto canvas that Picasso became dissatisfied with the bland flatness of his original design, and began to look for ways to make the figures more energetic.

One solution was to add forceful hatching recalling the Nude with Drapery of summer 1907; another was to relax the interlacing of the composition so that the figures could move apart in space, becoming more three-dimensional. Picasso pursued both solutions simultane ously. In a hatched, "rhythmic" version of the composition, the central figure has been elevated and detached from her neighbors, while the squatting figure at right has been replaced by a standing nude with raised arms, turning vigorously in a kind of exaggerated contrapposto.

Picasso's sketches for this turning figure suggest that he was deliberating among several different styles in which he might have reworked the canvas of the Three Women. One sketch is drawn with a kind of cartoon naturalism, exaggerating the

curved bulges of breasts, belly, and but tocks. Offering the viewer simultaneous access to multiple areas of sexual interest, it exemplifies Picasso's penchant for "drawing as if to possess," as Leo Steinberg has dubbed it. In another sketch, closer to the "rhythmic" version of the canvas, the model's contours are flattened into the familiar modules of the almond and the triangle. In a third, the curves are replaced by hard-edged forms. In effect, the curved bulges of the first sketch have been redrawn as faceted masses.

It was this muscular, geometric style of faceted planes that Picasso ultimately employed for the reworking of the large Three Women. It should be noted that there are no faceted studies for the composition as a whole. Picasso drew sketches of particularly complex details such as the arms and shoulders of the kneeling figure at left. However, much of the faceting seems to have been worked out in an ad hoc fashion, on the canvas itself.

In retrospect, the Three Women appears as a decisive turning point in the history of Cubism. It made a tremendous impression on the other members of Picasso's circle, achieving the success he had aimed for but failed to achieve with the Demoiselles d 'Avignon. Specifically, what attracted the attention of Braque and other artists was the way that Picasso's combination of interlocking shapes and geometric faceting solved the problem of integrating figure and ground without sacrificing the sense of sculptural form. Surprisingly, this novel means of integrating figure and ground does not seem to have struck Picasso himself as an important dis covery. For him, it was an expedient, a way of saving a large, ambitious canvas that had gone astray.