The Rincón 1-Real and 2-Reales Coins of La Plata and Potosí—An Ongoing Study

by Barry W. Stallard and Daniel Frank Sedwick

For several decades, Barry Stallard has been studying the dies of Lima, La Plata and Potosí under Philip II, particularly the shield-type minors of assayer R (Alonso Rincón). The goal has been to find definitive links between the mints, as it is known that Lima closed in 1572, under assayer X (Xinés Martínez), and its dies and tools were transferred piecemeal, first to La Plata and then to Potosí, under assayer R. The La Plata mint is known to have operated in late 1573 to early 1574, and Potosí began striking in late 1574. Our die-studies are ongoing, but these are our conclusions so far for the 1R and 2R denominations.

Historical Background

The Lima mint was legally created by a decree signed by King Philip II on August 21, 1565, a measure ostensibly taken to combat the proliferation of untaxed *plata corriente* pieces broken from unregulated silver ingots. Delays in construction pushed the official opening to September 2, 1568, with the first silver arriving September 6 and first coins minted September 7. The assayer was Alonso Rincón, and his initial R was placed on the dies to strike coins in a design similar to the Charles-Joanna coins of Mexico, with castles and lions in a simple shield on obverse and pillars and waves on reverse. Rincón struck these coins until October 11, 1569, around which time the treasurer, Lope de Mendaña Osorio, left office. Mendaña and other officials were prosecuted on several charges, particularly the minting of unauthorized 8 reales and the production of coins of less silver content than officially decreed (69 reales to the mark as opposed to 67). The trial was long and tedious and ended in absolution of those accused. Meanwhile, the King decreed on March 8, 1570, that the coinage of the American mints should be changed to the full Habsburg shield design in use at the mainland Spanish mints. A new assayer, Xinés Martínez, was appointed on October 23, 1570, and this assayer X struck a limited quantity of the pillars-type coins before the arrival of new punches on March 1, 1572, ushering in the full-shield design that followed for the next 20 years at Lima and 80 years at Potosí.

But assayer X's shield-type mintage was short-lived, as the Lima mint ceased operating sometime in 1572. From the beginning, the idea of opening a mint closer to the source of the silver—the massive Cerro Rico of Potosí—had been on the table, and La Plata was considered the best location due to its abundance of available firewood and the fact that La Plata was the location of an official Audiencia, or High Court. When Lima's production faltered, Viceroy Toledo saw his chance to move the mint to La Plata. Lima officials, however, opposed the idea and reluctantly sent only half the tools and dies to La Plata on January 27, 1573, where the re-activated assayer Rincón was forced to come up with new equipment and personnel at great cost. Toledo soon realized that La Plata was not the answer and decided to move the new mint to Potosí, but not before striking 2000 marks' worth of coins sometime around the end of 1573 and the beginning of 1574 at La Plata, just enough to send samples to the King to justify his actions, but not enough for the coins to be noticed in circulation in Lima.

The Potosí mint began striking sometime in 1574, converting just 8000 marks of silver into coins that year, all in smaller denominations, as 8 reales were not authorized until the spring of 1575. Since relatively few assayer-R 8 reales are known, in the absence of specific documentation we suspect Rincón left the office sometime in 1575 or 1576, succeeded by an unidentified assayer M. Another unidentified assayer L came next, followed by a B who is believed to be Juan Ballesteros Narvaez, serving off and on throughout the remainder of the century and Philip II's reign.

Denominations and Die Lifetimes

The denominations decreed by the King on August 21, 1565 for the first pillars-type coinage at the Lima mint were to be struck in the following proportions (percentages of weight in silver): 50% in 1R, 25% in 2R and 4R, and 25% in 1/4R and 1/2R.[1] There was no provision for 8 reales because they were not authorized by the crown, and the fact that they are so rare indicates their impact on the weight-to-denomination ratios can be assumed to be small, or at least did not affect the relative percentages of the lower denominations. Unfortunately, since the percentages decreed do not specify the ratios between 2R and 4R, nor the ratios between 1/4R and 1/2R, we cannot meaningfully discuss their individual striking quantities against the known populations. On the other hand, we DO know the exact decreed proportion of 1R. The total weights in silver minted for the years 1568 and 1569 were recorded respectively as 6071 marks and 16,467 marks[2], which at the standard rate of 67 reales per mark equates to 1,510,046 reales for those two years under Rincón, 50% of which is 755,023 coins in the 1R denomination. Our database includes 51 different Lima pillars-type 1R,[3] which indicates a survival rate of about 0.0066%, or about one coin for every 15,000 struck. In addition, Stallard has matched these 1R to five obverse and twelve reverse dies, which is a ratio of 2.4 reverse dies for every obverse die. We cannot assume these data are exact, as of course there are plenty of coins we have not studied or have not been found yet, but at least they give a general idea of what we may expect in the next series of coins.

Coins Struck at the La Plata Mint

Stallard has focused primarily on the 1R denomination to try to determine which ones could have been struck at the La Plata mint. As stated earlier, the shield-type design was in use for a brief time in 1572 by assayer X prior to the move to La Plata, and Rincón was the new assayer at La Plata when it issued coinage in late 1573 or early 1574. All the known Lima shield-type 1R of assayer X so far are from the

[1] Per private correspondence with Jorge Proctor in October 2010.
[2] Also courtesy of Jorge Proctor.
[3] Data courtesy of Cori Sedwick Downing.

same obverse and reverse dies, with P-X to the *right* of the shield.[4] Stallard's research turned up a single assayer-R 1R made with the same reverse die as assayer X's 1R, which we will call reverse X, and logically this must be the first issue of the new mint at La Plata. A second specimen turned up in 2009.[5] The obverse of this assayer-R issue—which Stallard has named O1—shows Rincón's letter R placed below the mintmark P to the *left* of the shield, and the legend reads HISPANIARVM with an H, same as on assayer X's 1R.[6] **Our conclusion is that a complete Lima 1R die (from assayer X) went to La Plata, and Rincón cut a new obverse die using some Lima punches but with his initial in a different position to denote a change of mint.**

Records state that 2000 marks of silver were coined at the La Plata mint, a paltry amount just to prove that minting there was viable. Given that, it does not make sense that Rincón would go to the effort and expense to make dies for multiple denominations. Indeed we do not know of any other denominations where a Rincón obverse is paired with a complete reverse die from Lima assayer X. So, if the entire 2000 marks of silver was all struck into 1R coins at 67 reales per mark, then 134,000 coins were produced. To date we have found only two coins with obverse O1 of Rincón and reverse die X from Lima assayer X.

Assuming the mintage was all 1R, however, a confirmed population of just two remaining coins for La Plata is not enough. As mentioned above, the survival rate for Lima pillars-type 1R is about 1 for every 15,000 struck (keeping in mind that future finds will only increase that number). Applying that rate to a mintage of 134,000 coins means that about nine coins should exist, barring any large-scale re-melting of these coins, for which there is no evidence or reason. Furthermore, the early Lima data show that on average 2.4 reverse dies were used for every obverse die. Therefore, there should be more La Plata coins struck from obverse O1 but with another reverse.

As it turns out, Rincón die O1 *has* been found paired with one other reverse—Stallard's die E—which in fact has *not* been seen paired with any other obverse die. Five of these O1/E coins are known, and all of them show die-wear, breaks and marks, indicative of the end of O1's useful life. **Thus we now have a known population of seven 1R coins (two O1/X and five O1/E) that most likely were struck at the La Plata mint.** Surely more will eventually come to light.

Stallard has observed just two more Rincón obverse dies—O2 and O3—and crucially both show P-R to *right* instead of left, in addition to bearing legends with ISPANIARVM spelled without an H. It makes sense that Rincón would make these major changes to indicate the move to another new mint at Potosí.[7] One major difference between these two obverse dies is the crown above the shield—O2's is elongated and closed by a lower loop to make an oval (like the Lima obverse die X), whereas O3 is unfinished (open) and rests on top of the shield (like the La Plata obverse die O1). This seems to indicate that O3 was the immediate successor to O1 and therefore most likely the first die used by the Potosí mint.[8] Stallard has also identified five reverses—A, B, C, D and F (E was later determined to be matched only with O1, as noted above). Reverse dies A through D are similar to each other, with castle and lion punches identical to La Plata die E, but die F has a unique feature: In the lower left quadrant we see the same Lima lion from assayer X (and the first La Plata issues), but in a worn state, most notably with very short stick-like front-right paw and rear-right paw (leftmost as viewed from front) and repaired tail. Note also that reverse die F is found paired with both obverses, O2 and O3, so those obverses could have been used simultaneously, although only one example of O3/F is known. Also, for all known coins with F reverses, the obverses were struck with well-worn dies showing breaks and marks, possibly indicating that reverse F was used toward the end of Rincón's tenure. Crucially, none of the Rincón 1R reverse dies is known to be paired with obverse dies with assayer initial M, Alonso Rincón's unidentified successor at Potosí, nor are any obverse dies known with M/R[9]; however, the known 1R reverses of assayer M *do* show castle and lion punches that are *similar* to Rincón's (albeit with the lion's tail distinctively curled back), as well as a closed-loop crown and ISPANIARVM without H, possibly further indicating that O2 was likely Rincón's final 1R obverse die.

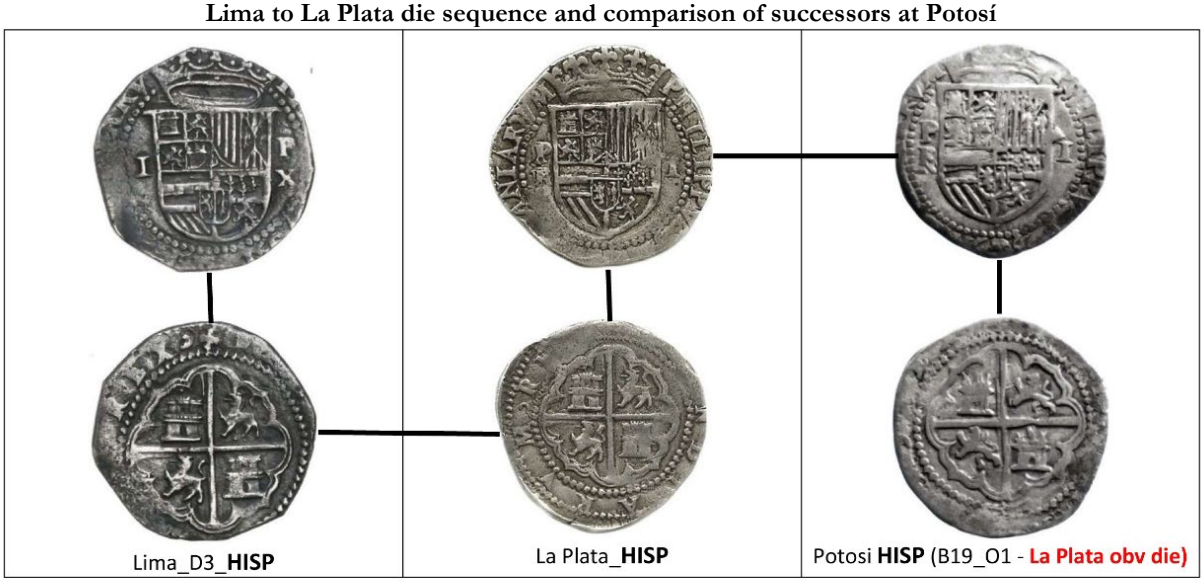
Our proposed die sequence for Lima-La Plata-Potosí shield-type 1R is therefore as follows:

Obverse die	Reverse die	ISP- or HISP-	Crown loop	Assayer	Mint	Notes
OX	X	HISP-	Yes	X to right	Lima	All known shield-type Lima 1R from these dies
O1	X	HISP-	No	R to left	La Plata	Full Lima rev die paired with new Rincón obv die
O1	E	HISP-	No	R to left	La Plata	Same first Rincón obv die, now worn, with new rev die
O3	A	ISP-	No	R to right	Potosí	Three known of this die pair
O3	B	ISP-	No	R to right	Potosí	Five known of this die pair
O3	C	ISP-	No	R to right	Potosí	Three known, this rev die not yet known with O2 obv
O3	F	ISP-	No	R to right	Potosí	Worn obv die, rev die with worn Lima lion, one known so far
O2	A	ISP-	Yes	R to right	Potosí	Three known of this die pair
O2	B	ISP-	Yes	R to right	Potosí	Four known of this die pair
O2	D	ISP-	Yes	R to right	Potosí	Four known, this rev die not yet known with O3 obv

[4] For examples, see Sedwick Auctions 18 (lot 556), 20 (lot 712) and 22 (lot 589).
[5] Sedwick Auction 6, lot 877.
[6] This was not consistent, however, as higher denominations of assayer X are known with either version, with or without H.
[7] This is not the case for the 2R, however, which we believe started at Potosí with HISP- and then changed to ISP-, all with P-R to left.
[8] By coincidence, the same argument is made in the die analysis in the 2R (see next section), although the similar numbering should not be taken as any association between the dies the two denominations.
[9] M/R *is* known for all the higher denominations, however: 2R, 4R and even 8R.

O2	F	ISP-	Yes	R to right	Potosí	Worn obv die, rev die with worn Lima lion

Lima to La Plata die sequence and comparison of successors at Potosí



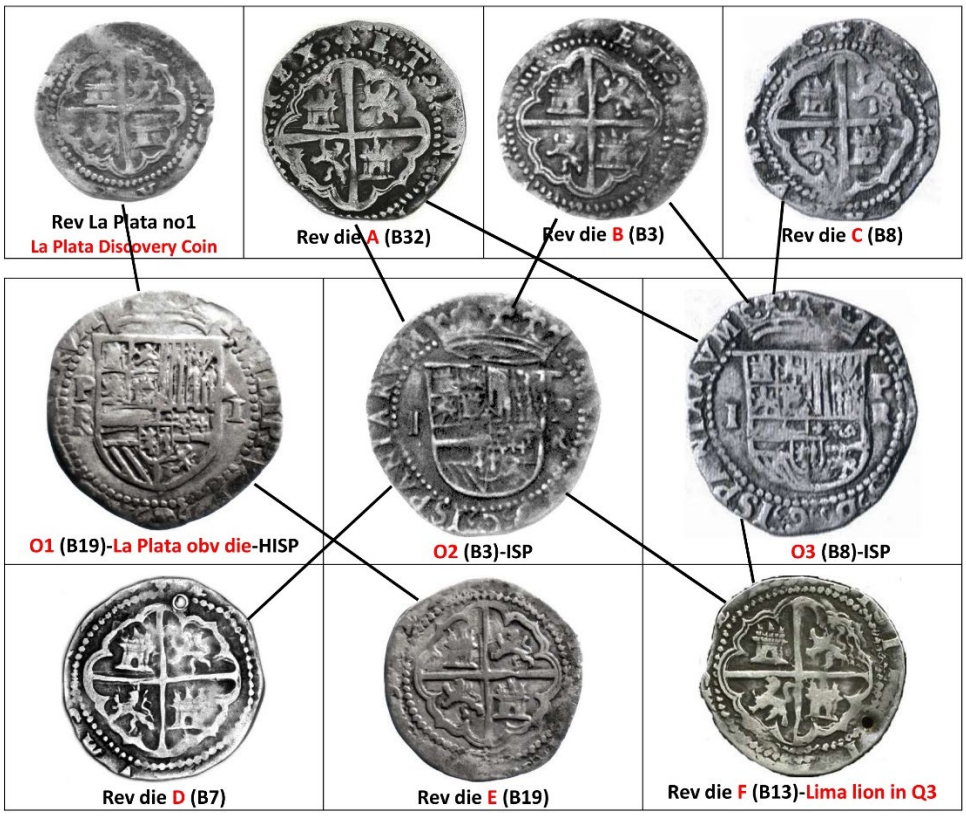
A transition to Potosi: O1(LaPlata obv die above) to Potosi obv dies O2 & O3 below

Which obv die, O2 or O3, came first after O1 (the LaPlata obv die)?

Number of reverse dies paired with each obverse die

Obverse die	Num of coins	Reverse die A	Reverse die B	Reverse die C	Reverse die D	Reverse die E	Reverse die F
O1	5					5	
O2	17	3	4		4		6
O3	12	3	5	3			1

Reverse die pairing



The Rincón Shield-Type 2 Reales

Now we move on to the 2 reales, which Stallard has studied just as extensively as the 1R, with an eye toward finding a possible chronological sequence at the Potosí mint (as none can be attributed to La Plata). His database includes 62 different examples, organized into four different obverse dies and three types of reverse dies, with each type tentatively broken into four individual reverse dies. Stallard is careful to point out the difficulty of trying to determine individual reverse dies and emphasizes instead the importance of the types with distinctive styles.

The table below shows the number of reverse die types paired with each obverse die. For obverse die O3 the number of coins (24, here marked with an asterisk) does not match the total number of reverse dies (23) because for one coin in the database the reverse die image is missing.

2R obverse die	Number of examples of obverse die examples	Number of type A reverse dies	Number of type B Reverse dies	Number of type C Reverse dies
O1	16	-	13	3
O2	9	-	9	-
O3	24*	17	3	3
O4	13	-	11	2

Note that the die-labeling O1, O2, O3, O4 refers to the order in which the coins were studied and is not meant to imply a chronological order of use. In fact, Stallard's data shows that most likely the sequence was O3-O4-O1-O2, based on evidence from die-sharing, in particular the extent to which each obverse die was paired with a reverse die (known as a die-marriage) that in turn was paired with a different obverse die (a different die-marriage), a common practice going back to ancient times. More about that later.

Here are details on the four known obverse dies O1, O2, O3 and O4 (note that two additional obverse dies, known from over-assayers only and not with Rincón's R alone, are described in the Addendum):

Four Potosí Rincón 2R Obverse Dies (note: ISP- and HISP- refer to the spelling of HISPANIARVM in the obverse legend)			
O1: ISP-, narrow and more open crown, P tipped left	**O2: ISP-, narrow and more open crown, P vertical**	**O3: HISP-, broad crown, lions of León tipped back, lower paw touching shield border**	**O4: HISP-, broad crown, lions of León upright, upper paw touching shield border**

Obverse dies O1 and O2 are similar: Both have a narrow crown with a closed loop for the base of the crown, and the spelling in the obverse legend is ISPANIARVM without an H. Dies O3 and O4 are also similar to each other, both with an elongated crown with narrow loop for the crown base and obverse legend with HISPANIARVM including the H, differing only slightly in the posture of the lions in León, as well as the size and spacing of the beads in the border separating the legends from the inner details.

The three reverse die types, labeled A, B and C, are as follows:

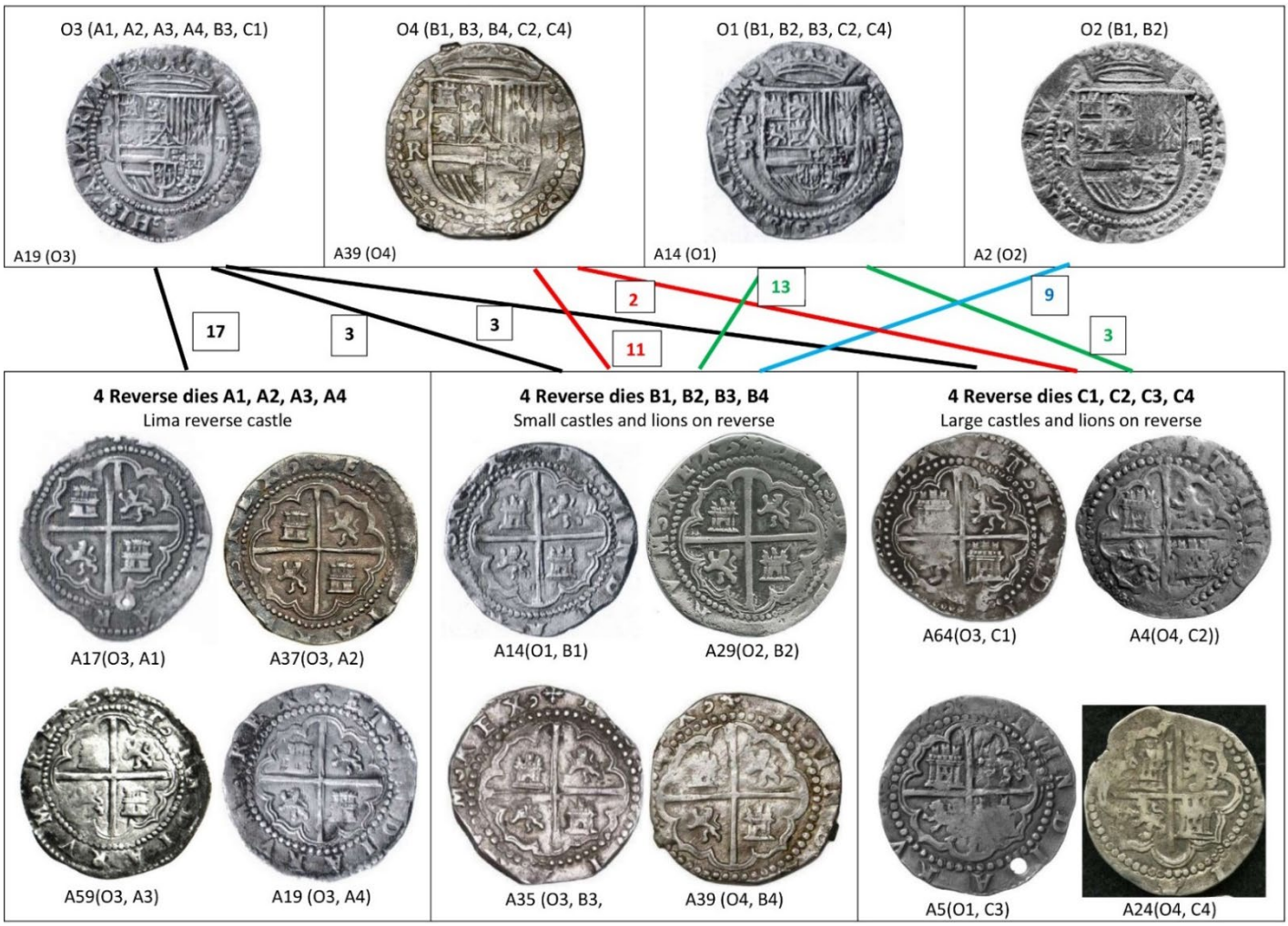
Three Potosí Rincón 2R Reverse Die Types			**Lima X 2R Reverse**
Type A: Lima-style castles and small Potosí-style lions	**Type B: small Potosí-style castles and lions**	**Type C: large Lima-style castles and standing lions**	**Small Lima-style castles (like Type A) and lions**
			

Determining exact reverse dies is tedious, but for each reverse type Stallard has found four different reverse dies (not detailed or pictured here due to space limitations), as follows:

Type A (small Lima-style castles with small Potosí-style lions): A1, A2, A3, A4
Type B (small Potosí-style castles and lions): B1, B2, B3, B4
Type C (large Lima-style castles and lions): C1, C2, C3, C4

We believe Type A reverse dies came first because in the upper-left and bottom-right quarters of the cross they employ a castle punch that originated from the Lima mint, as the same castle punch also appears on some Lima shield-type 1R and 2R coins of assayer X, as well as the La Plata 1R of assayer R referred to earlier. The seventeen coins in the Potosí 2R database struck with Type A reverse dies are all paired with an O3 obverse die, so it appears that O3 was the first die used at Potosí. Also, O3 and O4 both show HISP- in the legend, continuing the usual practice for most Lima issues and all La Plata issues. Die O4 would then follow O3 because of both a HISP- legend and a similar crown with elongated closed loop.

The table below shows the pairing and number of coins in the database for each obverse die with a reverse die type (with number of examples known in small boxes):

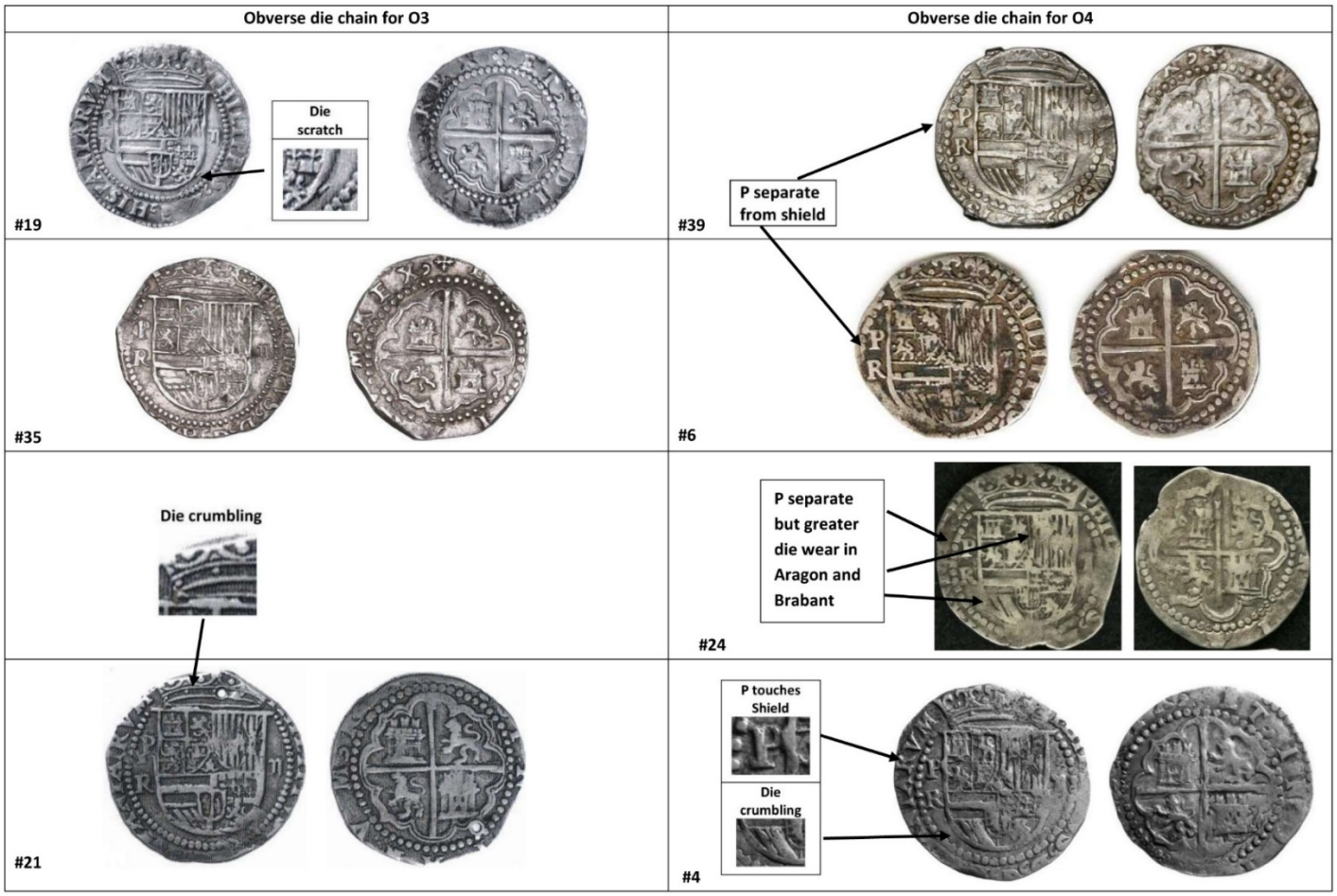


As we already saw with both the Lima pillars-type 1R (five obverses and twelve reverses) and the Potosí 1R (two obverses and five reverses), the number of reverse dies was greater than the number of obverse dies, probably due to breakage, in a ratio close to 2.5 to 1. Stallard's observed ratio in 2R so far, however, is 3 to 1 (twelve reverse dies to four obverse dies).[10] Consider that the obverse die was positioned upon a fixed anvil, while the reverse die was hand-held above it, almost always requiring multiple blows of the hammer to bring up the design. Reverse dies therefore suffered greater wear and breakage than the fixed obverse die. Also, the reverse die would often shift or rotate between hammer blows, resulting in a muddled image of overlaying reverse-die impressions (also known as a double-strike). To identify each reverse die, Stallard compared the relative positioning of the letters in the legend with respect to the outward-facing points of the tressure surrounding the cross-lions-castles, the positioning of the lions and castles within the tressure, the legend punctuation, and the circle of beads separating the legend from the tressure (either 71 small beads or 56 large beads, give or take). Often these key identification points are eliminated or muddled by multiple strikes. A further complication is that it appears that the die sinker tried to make each new die as closely similar to the old die as possible.

Die *wear* is another diagnostic factor. By careful examination of multiple specimens from the same die, Stallard was able to discern small flaws (cracks, chips, scratches and repairs) that progressed from use. This, combined with die-sharing study, leads to conclusions about chronology, since a worn-out obverse, for example, indicates that the reverse die it is paired with is later than another reverse die paired with a less-damaged version of that obverse die.

For example, here is a die-chain chronology for two obverse dies, O3 and O4, showing the deterioration of the dies in later pairings (the numbers at bottom left refer to the coin number in Stallard's database):

[10] Note, however, that adding the two unused dies in the Addendum makes it six obverse dies, which is a 2-to-1 ratio of reverses to obverses.



Our tentative conclusions, within a general order of O3-O4-O1-O2 and A-B-C, are as follows:

1) Obverse die O3 came first, paired with seventeen Type A reverse dies.
2) After Type A reverse dies wore out and more could not be made (perhaps the Lima reverse castle punch broke?), O3 paired with three Type B and then three Type C reverse dies.
3) Finally O3 broke, and its successor O4 was paired with eleven Type B and two Type C dies.
4) Then O4 broke and O1 followed, paired with thirteen Type B and three Type C reverses.
5) Sometime after all the Type C reverse dies wore out, perhaps simultaneously with O1, a new O2 obverse paired with nine Type B reverses until minting by Rincón at Potosí ceased. Die-sharing and die-wear analyses for O3 and O4 confirm that reverse Type A preceded Type B. Type C either followed type B or was used simultaneously with it, possibly coinciding with the arrival of additional equipment from Lima to Potosí.

Addendum: Two More Assayer Rincón 2R Obverse Dies

The as-yet unidentified successor to assayer Rincón at Potosí used his initial M, and in the 2R there are two different obverse dies known with M/R, soon to be followed by a complicated series of coins with assayer's initials L and B overstruck on earlier assayers. In the table below we show examples of the M/R coins in the left and center columns; the right column shows an example of multiple over-punching L/L/M to demonstrate the complicated and chaotic relationship of assayers as they moved in and out of office. During this period the right to hold a mint office could be purchased from the Spanish crown, and the office holder could also sell or even lease his office to someone else. Obviously this could and did lead to fraud by dishonest officials.

Additional Rincón 2R Dies A and B only seen as M/R, plus a similar L/M

Die A	Die B	Comparison to die A
 potosi_2R_M/R_ISP_die A_obv_bws	 Potosi_2R_M/R_ISP_die B_obv	 potosi_2R_LovrLovrM_ISP_obv_SedWk21-922
 potosi_2R_MovrR_die A_r_bws	 potosi_2R_MovrR_r_dieB	 potosi_2R_LovrLovrM_ISP_r_SedWk21-922

The two precursor obverse dies for the M/R coins are the two new assayer R dies. While they are similar to obverse dies O3 and O4, with higher crowns and ISP- without H, they show new lion punches that are more rampant, as do the reverses. Note in particular the backward curl in the tip of the tail, most easily seen for M/R reverse A and less so on M/R reverse B. Also note that the M/R obverse B has a mintmark P that is much smaller and tipped forward. The L/L/M coin is very similar to the two M/R dies, also with higher crown and ISP- without H. So why have we not found any clean-R examples of these dies? For now we believe the change in lions (and other punches) supports the theory that Rincón made these dies while other punches were wearing out, but they were not used until assayer M had already taken office.

The Study Continues

As new examples of Rincón shield-type 1R and 2R are found, we will continue to document them and update the database. Meanwhile, we will also study the smaller (1/4R and 1/2R) and larger (4R and 8R) denominations to find their die chronologies as well. It is our hope that anyone pursuing similar studies will collaborate and share their work to create a clearer picture for everyone.