Figures

Figure 1. Map of the Eastern Highlands of Colombia showing the findspots for the four offerings discussed in this paper (in yellow) as well as the location of important settlements and features of the landscape.
Figure 2. Front (a) and back (b) views of the three *tunjos* recovered from Carupa. Each object is ca. 1 cm in height. Note the matching fractured edges of two of them, and the ruptured edge of the third one, which may have fitted a fourth individual.
Figure 3. SEM view of two of the Carupa tunjos. Note the use of very similar wax coils to outline the facial features, the ruptured edges on the top of the head, the dendritic texture shown at the surface and the remnants of charcoal-rich mould material (black) left uncleared in crevices.
Figure 4. Plot of the alloy composition of the Carupa *tunjos* on a ternary colour diagram (pXRF data). Note their very similar compositions.
Figure 5. Overall view of the four tunjos in the Tocancipá offering. The tallest tunjo is c. 3 cm in height. For a photograph including these tunjos with the offering vessel, numerous stone beads, emeralds, glass fragments, two tejuelos and a gold nugget also recovered with this offering, see Figure S5.
Figure 6. a) SEM composite front view of two of the *tunjos* from Tocancipá (from the left, O33894 and O33895). Note the similar design of the headdresses, facial features and body, as well as the diffuse contours of the body parts; b) SEM composite back view of the same figures, showing how they were constructed from three different wax pieces for the legs, torso and head, respectively, as well as the wax ‘staples’ used to connect head and torso. The smoother, rounder texture at the tip of the feet is a vestige of the surface tension of the metal and confirms that these were cast up-side-down. For further images of the other two tunjos and other elements of the offering, see Figures S5-S8.
Figure 7. SEM detail of the headdress of *tunjo* O33895 from Tocancipá, showing the dendritic texture resulting from the slow cooling, as well as small filaments of metal connecting the thicker coils.
Figure 8. Plot of the alloy composition of the Tocancipá metal objects on a ternary colour diagram (data combined pXRF and ICP as per Table 2). Note the three broad clusters that can be distinguished on the basis of copper content, which correlate with the object typologies. The two black lines converging in the copper axis mark the envelope of Ag/Au ratios between the two gold nuggets, and the range of compositions that could be achieved by alloying native gold nuggets of these compositions with copper in different proportions.
Figure 9. General view of the Tenjo offering. Note the dark soot covering the objects, likely indicating past exposure to fire. The tallest figure is ca. 7 cm in height.
Figure 10. SEM composite view of the front of *tunjo* O33810 from Tenjo, carrying a spear thrower on his left hand and a *poporo* on his right one. Note the manufacture with coils of very uniform thickness. The amorphous bleb of metal by the left foot is likely the result of an air bubble trapped in the mould and subsequently filled with metal. For SEM composite of another *tunjo*, see Figure S9.
Figure 11. SEM detail of the penis of tunjo O33811 from Tenjo, where the tarnished, copper-depleted metal at the surface has flaked off to reveal an underlying and more corroded copper-rich core.
Figure 12. a) High magnification SEM detail of the surface of *tunjo* O33811 from Tenjo, showing the porous texture characteristic of tumbaga alloys gilded by depletion; b) Detail of the surface of *tunjo* O33293 from Suba under the same magnification shown for comparison, and illustrating a much smoother texture.
Figure 13. Plot of the alloy composition of the Tenjo tunjos on a ternary colour diagram, as analysed by XRF (data from Museo del Oro DTI as shown in Table 3).
Figure 14. General view of the metal artefacts from the Suba offering. Note the various colour shades resulting from different copper levels in the alloy. The objects marked with a number 1 at the base are those identified as deriving from a single artisan, possibly a more skilled ‘master’, and those with number 2 show similarities in manufacture that might indicate a single ‘apprentice’.
Figure 15. SEM composite view of the front of *tunjo* O33294 from Suba, depicting an individual carrying a baby. Note the fineness of the waxwork used to create the model employing exceptionally thin threads. Remnants or unfinished imperfections from the moulding and casting stage are noticeable in the casting flashes around the neck, the small blebs of metal likely filling mould voids (e.g. in the headdress and lips) and the insufficient amount of metal at the feet. The location of the casting flashes may indicate that, after investing the wax wax with a slurry of charcoal dust and clay, perhaps the model was ‘sandwiched’ between two relatively flat layers of stiffer clay, with their joint providing a weak point for the metal to run out (P. Craddock, pers. comm. 2014).
Figure 16. SEM composite view of the front of tunjo O33302 representing a baby tied up to a cot, modelled using very thin wax coils comparable to those in O33294 (Figure 15). A large casting error can be noticed on the top left, in addition to numerous blebs of metal likely filling mould voids.
Figure 17. Some of the tunjos from the Suba offering tentatively attributed to one or more ‘apprentices’. Note the irregular thickness and design of the lines drawn by wax coils, the comparatively lower detail, and the preference for flat rather than intricately decorated features.
Figure 18. Plot of the alloy composition of the Suba metal artefacts on a ternary colour diagram (pXRF data). Note the scatter of compositions, especially owing to variable copper levels.
Figure 19. Plot of the loading scores for artefacts from all offerings on the first three principal components after PCA of the LA-ICP-MS data.

Figure 20. SEM detail of a tunjo from Tenjo (left) alongside another one from Suba. Note very similar construction of their ears, each measuring ca. 2 mm in diameter.