My first full-time job was that of a laboratory technician in an aluminum smelting plant. The smelter was an exciting place to work, because the reduction of aluminum ore to the elemental state in this facility involved temperatures of about 1000 °C, an incandescent molten mixture of electrolyte and ore and enough electrical current to supply a large city. The dangerous conditions and materials used to make the aluminum seemed exotic to me at the time. Additionally, the plant was a beehive of activity. There was constant truck traffic as trailer (lorry) sized loads of alumina (ore), cryolite (electrolyte), coke, and cast iron (to make electrodes) were transported to and across the site. There was a continual stream of tractors moving enormous cauldrons of molten metal from the smelting area (called the Potline) to the Cast House, where daily, 240 tons (about 218,000 Kg) of liquid aluminum was cast into ingots, slabs and billets.

One day, as I was passing the Cast House with some co-workers, I noticed a large lump of black smoking waste material lying on the ground. It’s volume was approximately a cubic meter, it was black and ugly and it was exuding a terrible odor. “What is that?”, I asked my companions. They told me that the object was a piece of “dross”. I found out that dross is the impurity and contamination that is separated when metal is refined or purified. It has virtually no value. My lump of dross was composed of coke and pitch, unrefined alumina, cryolite and some small quantity of aluminum. There was nothing that could be done with it, except to try to reclaim some of the raw materials it contained, especially those which could not be sent to the landfill.

Dross is a useless, contaminating waste product that must be removed from metal in the refining process. It has no value and its presence in metal diminishes its value. For metal to have value, its dross must be removed. The proverbs say this about dross:

PRO 25:4  Take away the dross from the silver, and there shall come forth a vessel for the finer.  5  Take away the wicked from before the king, and his throne shall be established in righteousness.

In this proverb, advisors of the King who are of bad character are compared to dross that contaminates the kingdom. They must be removed for the kingdom to operate in a Godly way and for the King’s dynasty to endure. In many places, the Bible uses the analogy of dross to show how character is polluted by its presence. God often uses the analogy of smelting out the dross to describe how character is refined. A good example is in the first chapter of Isaiah, where God finds fault with Judah for departing from acceptable standards of righteousness and character:

ISA 1:22  Thy silver is become dross, thy wine mixed with water:  23  Thy princes are rebellious, and companions of thieves: every one loveth gifts, and followeth after rewards: they judge not the fatherless, neither doth the cause of the widow come unto them.  24  Therefore saith the Lord, the LORD of hosts, the mighty One of Israel, Ah, I
Here, God promises to refine Judah by purging out the dross and removing base metal. God desires that His people would have character of pure silver, unalloyed and uncontaminated by impurities. That is very encouraging, however we should realize that the refining process is a difficult one, from the point of view of the silver. To remove the dross from silver ore, the ore must be crushed, roasted and then fired at temperatures of 550 °C. When God sets to work removing our dross, we can feel as if we are in a furnace!

ISA 48:10  Behold, I have refined thee, but not with silver; I have chosen thee in the furnace of affliction.

ZEC 13:9  And I will bring the third part through the fire, and will refine them as silver is refined, and will try them as gold is tried: they shall call on my name, and I will hear them: I will say, It is my people: and they shall say, The LORD is my God.

REV 3:18  I counsel thee to buy of me gold tried [refined] in the fire, that thou mayest be rich; and white raiment, that thou mayest be clothed, and that the shame of thy nakedness do not appear; and anoint thine eyes with eyesalve, that thou mayest see.

Sometimes, the furnace of affliction is required to perfect our character. Many will have to endure the “Great Tribulation” of Revelation 7:14 to have their dross removed. This Great Tribulation is the ultimate refining process. It will be a fiery trial indeed and very difficult to endure.

Is there another way that our character may be refined? Is it possible to take an easier route to refine our character? The Bible does give us some hope that this can be possible. Paul’s second letter to Timothy suggests there may be a way:

2TI 2:20  But in a great house there are not only vessels of gold and of silver, but also of wood and of earth; and some to honor, and some to dishonor. 21  If a man therefore purge himself from these, he shall be a vessel unto honor, sanctified, and meet for the master’s use, and prepared unto every good work. 22  Flee also youthful lusts: but follow righteousness, faith, charity, peace, with them that call on the Lord out of a pure heart.

Paul speaks of a purity of character, of heart, which can be achieved by a self-purging. James also tells us that we can purify our own hearts:

JAM 4:8  Draw nigh to God, and he will draw nigh to you. Cleanse your hands, ye sinners; and purify your hearts, ye double minded.
James 4:8 tells us that we can become pure silver by drawing close to God. The generally accepted method for doing this is by prayer, Bible study, meditation and occasional fasting.

God’s intention is to exclude us from His Kingdom if we remain unrefined metal throughout our lives. Psalm 24 makes this clear:

_PSA 24:3_ Who shall ascend into the hill of the LORD? or who shall stand in his holy place? 4 He that hath clean hands, and a pure heart; who hath not lifted up his soul unto vanity, nor sworn deceitfully.

God is able to discern the condition of our hearts, whether they are refined silver or full of impurities.

_PRO 17:3_ The fining pot is for silver, and the furnace for gold: but the LORD trieth the hearts.

The ten commandments were given to show us right from wrong — to identify for us the dross in our character. In ancient Israel under the Old Covenant, only adherence to the letter of the law was required. In the new covenant, the law is to be obeyed outwardly and inwardly. The law is to be written in our hearts and should govern not only our actions, but our innermost thoughts and intents. God had planned that this would be so from the beginning. What was the first thing God said about the new covenant?

_JER 31:31_ Behold, the days come, saith the LORD, that I will make a new covenant with the house of Israel, and with the house of Judah: 32 Not according to the covenant that I made with their fathers in the day that I took them by the hand to bring them out of the land of Egypt; which my covenant they brake, although I was an husband unto them, saith the LORD: 33 But this shall be the covenant that I will make with the house of Israel; After those days, saith the LORD, I will put my law in their inward parts, and write it in their hearts; and will be their God, and they shall be my people. 34 And they shall teach no more every man his neighbor, and every man his brother, saying, Know the LORD: for they shall all know me, from the least of them unto the greatest of them, saith the LORD: for I will forgive their iniquity, and I will remember their sin no more.

Jesus made it quite clear that He was raising the bar in terms of commandment keeping. He said that it was no longer acceptable to refrain from sinning while harboring sinful thoughts in the heart.

_MAT 5:27_ Ye have heard that it was said by them of old time, Thou shalt not commit adultery: 28 But I say unto you, That whosoever looketh on a woman to lust after her hath committed adultery with her already in his heart.
In these verses, He tells his disciples that it is the intents of the heart that pollute us with dross. We need to keep ourselves free and clean even from thoughts and desires that are impure.

Our words must also be purified and refined:

**PRO 10:20**  The tongue of the just is as choice silver: the heart of the wicked is little worth.

Finally, our hearts must be free of the dross of insincerity. God detests hypocrisy. In His ministry, Christ was patient and forgiving of many sins, but when He discerned hypocrisy in the hearts of the Pharisees, He condemned them publicly. The pure heart, however, is marked by integrity and sincerity.

**1TI 1:5**  Now the end of the commandment is charity out of a pure heart, and of a good conscience, and of faith unfeigned:  (King James Version)

or

**1Ti 1:5**  Now the goal of the commandment is love out of a pure heart, from a good conscience, and from sincere faith…  (English Majority Text Version)

One final scripture from the Proverbs illustrates the evil of insincerity:

**PRO 26:23**  Burning [fervent but insincere] lips and a wicked heart are like a potsherd covered with silver dross.

All humans are a mixture of precious metal and worthless dross. God is determined to remove the dross from our character. I believe the scriptures indicate that we are given a chance to purify ourselves before God decides that we must undergo the fiery heat of the smelting and refining process. If we are to escape the furnace, we must be determined to root out of our character the dross of wickedness and hypocrisy.

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