Israel in the Iron-Smelting Furnace? Towards a New Understanding of the פֿוּר הַבַּרְזֵל in Deut $4:20^1$

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Abstract: Most scholars interpret the metallurgical imagery of בַּבְרְזָל in Deut 4:20 and parallels as a reference to an iron-smelting furnace describing the harsh realities of Israel's slavery in Egypt. A consideration of the Hebrew mode of expression however leads to the conclusion that the metaphor refers to a crucible made of the hardest metal generally known in antiquity, which is iron. The metaphor therefore conveys the impression that the Israelite existence in Egypt is described like being trapped in a crucible made of a hard and impenetrable material that cannot be broken. This article also argues that Deut 4:20 appears to be the provenance of the parallel phraseology of 1 Kong 8:51 and Jer 11:4.

Keywords: Deut 4:20; iron furnace; metallurgical metaphor

Introduction

As is well known, Deuteronomy's powerful admonition to sincere covenantal loyalty takes place on the backdrop of Yahweh's liberation of Israel from Egypt.² The speeches of Moses are formulated as addressing an audience that has been liberated recently from forced labour under the Egyptian state slavery scheme. Deuteronomy motivates several of its injunctions by referring to the fact that the audience consists of liberated slaves. In Deut 4:20 a peculiar phrase is used for the exodus experience: This verse describes Egypt in terms of a metallurgical metaphor, a בַּרֶל בַּרְזֶל, in order to define the character and the scope of the exodus event. "But the LORD has taken you and brought you out of *the iron furnace*, out of Egypt, to be a people of his own inheritance, as you are this day" (ESV; my emphasis). The Lord took (לְקָה) the people by force and brought (צִּרֶל בַּרְזֶל) it out from a context described metaphorically as an iron furnace (בּוֹר בַּרְזֶל) and elucidated as Egypt.

The question here is what this phrase בּוֹרְ הַבּרְ חָלֹ means in Deut 4:20. Is it a furnace *made out of* iron? Alternatively: Does the phrase rather refer to an *iron-smelting* furnace? Does the noun בַּרְיָל denote the *material* that the furnace has been made of, *i.e.* iron, or does בַּרְיָל mark the *product* of the smelting activities in the furnace, *i.e.* the crucible in question is a device for producing iron bloom? Is it an iron-smelting furnace? The next question is, whether a reference to an iron-smelting device carry any meaning at all in the historical context into which Deuteronomy and Deut 4 in particular apparently speak. The final question to be addressed is: What particular message does this metaphor convey?

¹ It is a great pleasure for me to dedicate this article to Professor Nicolai Winther-Nielsen on the occasion of his 60th birthday on 26 October 2013. Most of his scholarly interest and contribution to the academia have been about strategies for reading the Hebrew Bible and for understanding the Biblical texts in the light of the Ancient Near Eastern context. This short paper on a tiny phrase in Deut 4 is a token of a long-standing friendship and a tribute to his outstanding scholarly achievements.

² Cf. to this topic most recently Schulmeister 2010.

This peculiar expression also occurs in two other places in the Hebrew Bible, 1 Kings 8:51 and Jer 11:4. The phraseology is identical in these three verses: מַבּר מַבּרְיָל appears in hifil with Yahweh as subject followed by our phrase. In all three instances, פֿוּר הַבַּרְיָל has a figurative meaning as an impressive metaphor for the slavery in Egypt, and Egypt always stands in juxtaposition to the phrase פֿוּר הַבַּרְיָל In the immediate context, several recurring Deuteronomistic phrases are found, and Israel's special status is described with identical or similar expressions: Israel is God's עַם נַחָלָה his particular people of inheritance (Deut 4:20) –, his עַם and his בַּחָלָה (1 Kings 8:51) or his personal people (Jer 11:4b: לְי לְעַם: 11:4b:

The larger context of the shared phrase is different, however. In 1 Kings 8, the whole clause appears in the context of a plea for God's generous forgiveness. It states the reason why God should forgive. Jer 11:3-5 are formulated as God's address to Israel and sum up the general binding covenant conditions that were announced in the wake of the exodus. The context for Deut 4:20 on the other hand, is a sincere warning against making any image like the nations (4:15-19). V 20 expresses a most forceful contrast between the pagan nations and Israel in terms of how God has dealt with the people of Israel compared with the nations: God has allotted (קלקה) the planets and the stars to the nations (v 19b); Israel, however, he treated differently. Yahweh took (קלקה) Israel out of the ironfurnace to be his inheritance. The same particular exodus-related metaphor is therefore used in rather different contexts in Deut 4:20, 1 Kings 8:51, and Jer 11:4.

Background to the enquiry

The great majority of scholars assume that the בּוֹר הַבּרְיָל here refers to an iron-smelting furnace or crucible. Jack Lundbom has recently published a major commentary on Deuteronomy. In this excellent commentary, he sums up the main scholarly understanding when he simply states, an iron furnace is "[a] small furnace in which iron is smelted" (Lundbom 2013:244).⁵ It is a device for smelting the iron ore in order to produce crude iron. Because of the Deuteronomistic phrases in the chapter, most scholars consider Deut 4 to be a very late addition to the Deuteronomy tradition, either from the late exilic or from the postexilic period (Vieweger 1993:267; Otto 2012).

Lundbom, however, voices scepticism against dating the catechesis in Deut 4 to the exile or the period immediately after. He argues that mass deportation became a reality for Israel already under the Neo-Assyrian regime (2013:231). Because of Israel's general familiarity with expatriation and exile, the admonitions in Deut 4 may very well be earlier than the Babylonian exile, he claims.

The technique of smelting the iron ore and of quenching and hardening the crude metal is a very complicated one and it took the smiths several centuries to learn how to control the process of quenching and annealing the crude iron in order to get a final product that was durable and hardened and had hardness qualities exceeding those of bronze. Only after the 7th or 6th Century BC was this process widely adopted in Egypt and Palestine. However, in the 2nd Millennium BC it was not known in Egypt or Palestine. Some scholars therefore see the reference to an iron-smelting device

³ To the expression עם נְחֵלָה, see Loewenstamm 1986.

⁴ A wordplay may be observed between חָלֵק in v 19b and לְקַח in v 20a, as rightly seen by Schulmeister (2010:181), Block (2012:131), and others. Both verbs are in qal *qatal* with YHWH as subject.

⁵ So also Weinfeld 1991:207; Vieweger 1993:265; Tigay 1996; Fischer 2005:410; Notebaart 2010:52.

in Deut 4:20 as another evidence of the lateness of the chapter (cf. Sawyer 1983; Vieweger 1993). Notebaart concludes, "The image of an iron (smelting) furnace at the time of the Israelite sojourn in Egypt is an anachronism" (Notebaart 2010:53).

The imagery is often understood as referring to the intense suffering and heat of the slavery in Egypt. Most scholars think that the metaphor alludes to the unbearable hot temperatures resulting from the process of smelting the iron ore in the furnace (Vieweger 1993:271; Tigay 1996:51; Fischer 2005). Some scholars also suspect the metaphor to allude to the very process of transformation that the iron ore goes through from the initial state of ore to the hardened steel. The metaphor thus conveys the idea of social transformation into becoming God's people. Alternatively, because of the intense suffering of the slaves in Egypt, other scholars understand the suffering as a means of purification from impurities, cf. the phrase כור שֵׁנִי in Is 48:10 (Mayes 1979; Merrill 1994; Christensen 2001).

Deut 4:20 and the other references

Before looking at the grammatical unit כּוּר הַבּרְזֶל itself, let us take a closer look at Deut 4:20 and compare it with the other occurrences of the phrase. It is commonplace to view Deut 4:20 as a part of the Deuteronomistic cliché language in Old Testament (Thiel 1973:143-144; cf. Otto 2012:567). However, Deut 4:20 differs from Jer 11:4 and 1 Kings 8:51 not only in relation to context, but also in two important aspects and in one minor detail.

Firstly, in Deut 4:20 the usual Hebrew construction יוֹצִיא מִמְצְרֵיִם is preceded by the verb יהוה יוֹצִיא מִמְצְרֵיִם "take": ... אֶתְּכֶּם לְּקַח יהוה וַיּוֹצִא "The Lord took you and brought you out ..." The other two occurrences of the phrase do not contain this qualification, but only employ the standard expressions with hifil. Deut 4:20 however is in agreement with Deut 4:34 which also uses יְּלְחֵה in order to characterise God's special involvement in the exodus event. He tore Israel out of Egypt. The strong power of God is underlined by using this verb. Schulmeister is right in calling this wording "außergewöhnlich" (2010:179). The construction with לְּקָה followed by יצֹא hifil in order to characterize the exodus event is found nowhere else in the Hebrew Bible.

Secondly, in Deut 4:20 the place name מִּצְרֵיִם ("Egypt") stands as an apposition to the phrase בּוֹר . In 1 Kings 8:51 and in Jer 11:4 it is the other way around. Deut 4:20 has the unusual string מִבּרְיֵל מִמְּצְרֵיִם . In the other two instances, we find our phrase standing in apposition to the familiar apposition constructs like מִּצְרֵיִם מְבֵּיִת מְבָּיִת מְבָּיִת מְבָּיִת מְבָּיִת מְבָּיִת מְבָּיִת מְבָּיִת מְבָּיִת מְבָּיִת מִבְּיִת מְבָּיִת מִבְּיִת מְבָּיִת מִבְּיִת מְבָּיִת מִבְּיִת מְבָּיִת מִבְּיִת מִבְּיִת מְבָּיִת מִבְּיִת מְבָּיִת מִבְּיִת מִבְיִת מִבְּיִת מִבְּיִת מִבְּיִת מִבְּיִת מִבְּיִת מְבָּיִת מִבְּיִת מְבָּיִת מִבְּיִת מְבָּיִת מְבָּיִים מְבָּיִים מִבְּיִים מִבְּיִים מְבָּיִים מִבְּיִים מִבְּיִים מְבָּיִים מְבָּיִים מְבָּיִים מִּבְּיִים מְנִיּבְיִים מְבָּיִים מְבָּיִים מְבָּיִים מְנִיּים מִבְּיִים מְּבָּיִים מְּבָּיִים מְבָּיִים מְבִּים מְבָּיִים מְבָּיִים מְּבָּים מְבִּים מְבָּים מְבִּים מְּבָּים מְּבָּים מְּבָּים מְּבְּיִים מְבִּים מְּבָּים מְּבְּיִים מְּבָּים מְבִּים מְבְּיִים מְּבְּיִים מְבְּיִים מְּבְּיִים מְּבְּיִים מְבָּיִים מְבְּיִים מְבְּיִים מְבְּיִים מְבְּיִים מְבְּיִים מְבָּים מְבְּיִים מְבְּיִים מְבְּיִים מְבְּים מְבְּיִּים מְבְּיִים מְבְּיִים מְבְּיִים מְבְּיִים מְבְּיִּים מְבְּיִּים מְבְּיִים מְבְּיִים מְבִּים מְבִּים מְבְּיִים מְבִּים מְבִּים מְבְּיִּים מְבִּים מְבְּיִים מְבִּים מְבְּיִּים מְבְּיִּים מְבְּיִּים מְבְּיִים מְבְּיִּבְּים מְבְּיִּבְים מְבְּיִּבְּים מְבְּבְּים מְבְּיִבְּים מְבְּיִים מְבְּיִּבְּים מְבְּיִבְּים מ

Thirdly, Deut 4:20 does not use the typical Deuteronomic stock phrase מֵאֶרֵץ מִצְרֵיִם ("from the land of Egypt"), like Jer 11:4, but has only מִמְצְרֵיִם, without the head name אֶרֶץ. This is again in line with the expressions used in Deut 4:34 and 37.

⁶ Thus Paula McNutt in her book *The Forging of Ancient Israel* (1990:250); see also her article from 1988. McNutt is followed by Schulmeister (2010:184) and Notebaart (2010:56-57).

⁷ Cf. Deut 5:6; 6:12.21; 7:8; 9:26; 13:6.11; 16:1; 26:8; 29:24.

 $^{^8}$ The sequence לְקַח וַיּוֹצִיא from 4:20 is split up in 4:34 לְקַחַת 4:37 and 4:37 מָמִצְרַיִם, ... מָמִצְרַיִם

Deut 4:20 therefore is not just another variant of the usual Deuteronomistic set of exodus phraseology. It clearly has its own particular notion.

According to William Holladay, Jeremiah probably is the first one who to have coined the metaphor פּוּר הַבַּרְיֶל in Jer 11:4. From Jer 11 the expression entered Deut 4 (Holladay 1986:352). Cor Notebaart follows Holladay in his study on the metallurgical metaphors in the Bible (Notebaart 2010:54; thus also Vieweger 1993:269).

עבור מש that Deut 4:20 must be considered the first place to have used the expression בּוֹר as a freshly coined term for the experience in Egypt. In this verse, the unusual metaphor is explained with the appositional place noun מצרים. In 1 Kings 8:51 and Jer 11:4, the expression has become part and parcel of the Deuteronomistic election and covenant phraseology employed in these verses. In Jer 11:4-5 many Deuteronomistic phrases are mingled, and instead of having the usual combination of אֶרֶץ מִאָרֵיִם followed by בֵּית עָבְּדִים ("house of slavery"), Jer 11:4 swaps it with the phrase פֿוּר הַבּּרְזֶל

In Deut 4:20 the metaphor is deeply imbedded in its context. In 4:16-19 Moses warns against manufacturing any hewed and carven images. Images were often embellished with pieces of precious metals attached to the hewed or carved figure (cf. Deut 7:25). The metal pieces of gold, silver, or bronze were produced through the hard work of heating and refining the ore in crucibles. Many images were also made out of cast metal, the so-called מַּפֶּבָה (cf. 9:12.16). Israel should not make any image at all, since they themselves had had the dreadful experience of being locked in a crucible, from which their God took them out by force. The use of the phrase בּוֹר הַבַּרְיָל in Deut 4:20 as a metaphor for Egypt may have been motivated in part by the statement in vv 16-19 that Israel should not fabricate any carved or molten figure. In 1 Kings 8 and Jer 11, however, the phrase is not related to any creative work in its context.

Deut 4:20 therefore must be considered the originator of our phrase.

What is a כור בַּרְזֵל ?

A כוֹר is a small crucible for smelting metals. Modern Hebrew dictionaries all agree upon this definition. A crucible was made of refractory loam. According to Kelso, a נוֹר functioned as a crucible of clay for smelting and refining precious metals like gold and silver. However, it also could designate a furnace for heating metal ore so it became soft and malleable and could be reduced by hammering (§ 94-95).

Notebaart is the only scholar to my knowledge who has seriously considered the exact sense of the construct chain פֿוּר הַבַּרְזֵל. He finds that translating the metaphor causes some ambiguity: It might

⁹ Holladay's only argument is that "Deut 4:1-40 ... evidently [was] added secondarily".

¹⁰ L. Koehler & W. Baumgartner, *Hebrew and Aramaic Lexicon of the Old Testament* (Leiden: Brill 1994-2000): "little smelting furnace" (cf. W. Dietrich & S. Arnet, *Konzise und Aktualisierte Ausgabe des Hebräischen und Aramäischen Lexicons zum Alten Testament* [Leiden: Brill 2013]: "kleiner Schmelzofen"); W. Gesenius, *Hebräisches und aramäisches Handwörterbuch über das Alte Testament* (18th ed.; Berlin: Springer 1987-2010): "Smelzofen, für Metall"; David J. A. Clines (ed.), *The Dictionary of Classical Hebrew* (Sheffield: Sheffield Academic Press 1993-2011): "smelting-pot; small furnace".

refer to an iron-smelting furnace. Alternatively, the sense might be that the iron stands for the material of which the אונד was constructed (Notebaart 2010:52). The Hebrew may support both meanings.

The Hebrew Bible presents us with many examples of constructions with בַּרְזֶל ("iron") in a construct chain, where the noun "iron" stands in the absolute state (the genitive). The construction always connotes the genitive of material. If the noun in the construct state is an object, then this object is made out of בַּרְזֵל Let us consider some examples:

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"an iron object" (Num 35:16)
    כָּלָי בַּרְזֵל
                  "chariots of iron" (Jos 17:16)
    רֶכֶב בַּרְזֵל
                 "iron picks" (2 Sam 12:31)
חַרִיצֵי הַכַּרְזֶל
מַגזַרוֹת הַבַּרְזֵל
                  "iron axes" (2 Sam 12:31)
 בָּל כְּלִי בַּרְזֶל
                  "any iron tool" (1 Kings 6:7)
   קרני בַּרזֶל
                  "horns of iron" (1 Kings 22:11)
                  "iron stylus" (Job 19:24; Jer 17:1)
                  "iron rod" (Ps 2:9)
   שֶׁבֶט בַּרְזֶל
                  "threshing sleds of iron" (Am 1:3) 12
חַרַצוֹת הַבַּרְזֵל
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Deuteronomy also provides some further examples of בַּרְזֶל ("iron") in second position in a construct chain where "iron" labels the material of the object:

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עָרְשׁ בַּרְזֶל "iron bed" (Deut 3:11)
על בַּרְזֵל "iron yoke" (Deut 28:48)
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In construct chains with other materials in the second position, the same phenomenon may be seen that the genitive shows the genitive of material, e.g. a "ring of gold" (Gen 24:22), "mice of gold" (1 Sam 6:4), "silver jewelry" (Gen 24:53), "objects of bronze and iron" (Jos 6:19), "bronze alter" (2 Kings 16:14), "altar of earth" (Ex 20:24).

When the אֶרְשׁ בַּרְזֶל in Deut 3:11 refers to a bed made out of "iron", it seems probable that the similar construct chain פוּר הַבַּרְזֶל in 4:20 should also denote the material that the crucible has been made of. The בּוֹר הַבַּרְזֶל therefore refers to a crucible made out of iron and having the qualities of iron.

Already the Septuagint seems to have shared this understanding. It renders the phrase מְבּוּר הַבַּרְזֶל in Deut 4:20 as בא דֿאָכ אמעוֹעסט דאָכ σ or of the furnace made of iron". 14

If the biblical authors of Deut 4:20 with parallels had wanted to refer their audience to an ironsmelting crucible, they probably would have constructed the phrase with the preposition ל, i.e. פֿוּר

¹¹ Bruce K. Waltke & M. O'Connor, *An Introduction to Biblical Hebrew Syntax* (Winona Lake: Eisenbrauns 1990), provides several examples of the genitive of material (§ 9.5.3.d).

¹² Cf. also Ps 149:8; Isa 45:2; Jer 1:18; 28:13; Ez 4:3.

¹³ Several scholars have suggested that the "iron bed" should be understood as a sarcophagus made of basalt (so e.g. Weinfeld 1991; Veijola 2004; 2006). However, there is no evidence that the Hebrew עֶרֶשׁ could stand for a sarcophagus (Lundbom 2013).

¹⁴ Thus also the Vulgate: de fornace ferrea Aegypti. Peshitta has a more literalistic rendering: או מבי בסול און my kwr' dprzl', thus passing on the ambiguity. My thanks go to Rev., Ph.D. Johannes B. Glenthøj for helping me with the Syriac version

לְבַרְזֶּל ("a crucible designed for (producing) iron"). Prov 17:3 and 27:21 give us examples of this construction. Here the sage speaks about a מַצְרֵף לְבֶּסֶף and a בִּוּר לַזָּהָב – a refining pot for silver and a crucible for gold. The preposition ל thus denotes the purpose of the crucible and the pot. That the prefix here should be the so-called *emphatic lamed* (Notebaart 2010:52) is by no means evident. A far simpler solution is that the prefix f is the *lamed* of purpose (Waltke & O'Connor § 11.2.10.d) and that it functions to indicate the purpose of the smelting device.

From many parallels in the Hebrew Bible, it therefore appears that a פוּר בַּרְזֶל does not signify an iron-smelting implement, but denotes the material of the crucible as being made out of iron.

Notebaart objects to this obvious interpretation that the idea of a furnace constructed of iron "is not a realistic option", because metal smelting furnaces in antiquity were made of refractory clays and not of iron (2010:52). This is his primary argument for turning down the option that the metaphor refers to a smelting machinery made out of iron. However, several metaphors with "iron" in the Hebrew Bible are not realistic in the sense that people in fact had any experience with such iron implements. For example, Jeremiah announces that God has placed a yoke of iron on the neck of the nations (Jer 28:14). No one in Jeremiah's day had ever carried an iron yoke on their shoulders or watched any blacksmith fabricate such a thing. Nevertheless, from their experiences with wooden yokes and from their understanding of the qualities and attributes of iron, they were perfectly able to catch the threatening message imbedded in Jeremiah's metaphor "give iron" ("yoke of iron"). Deut 28:48 also employs the metaphor of an iron yoke that God will place upon Israel. The imagery stresses the austerity and the unbreakability of the foreign power.

This also applies to the metaphor פֿוּר הַבַּרְזֶל in Deut 4:20. Even if a crucible made of iron appears unrealistic when taken literally, as a metaphor it speaks a strong message to an audience that has had hard experiences from working with hot crucibles and furnaces and has some comprehension of certain qualities of iron.

Iron as a metaphor for hardness

If this analysis of the phrase פּרְר הַבּרְיֶל is correct, we should not interpret the metaphor on the background of the prevalence of iron smelting technology in ancient Egypt and Palestine. ¹⁶ The question of when and how the ancient Israelites learned the complex iron smelting technology and learned how to reduce iron bloom and make it workable through carbonization is of course interesting, but does not have any bearing on our question here of how to understand the metaphor in Deut 4:20.

Instead, we should ask whether the ancient Egyptians and/or Israelites associated iron with certain attributes that might give a clue to understand the iron imagery. Since the פוּר הַבַּרְזָל functions here as a metaphor for Egypt, it is relevant to ask which conceptions the Egyptians had of iron.

The oldest iron implements found to date in Egypt are nine tubular iron beads, found among grave goods in Gerzeh (south of Cairo) in 1911. The tombs have been dated to ca. 3200 BC. The most

¹⁵ Notebaart refers to Waltke & O'Connor, *Introduction to Biblical Hebrew Syntax*, § 11.2.10.i. However, the construction in Prov 17:3 and 27:21 differs from the examples discussed in Waltke & O'Connor.

¹⁶ On the history of the extraction of iron in Egypt and Palestine, see Scheel 1989:17-30 and Notebaart 2010:260-268, and the articles by Ogden 2000; Larcovara & Markowitz 2001; van der Steen 2008.

recent scientific investigations of the iron composition in the beads have shown that the iron is not telluric but meteoric iron (Rehren 2013). However, meteoritic iron is very hard to belabor and to hammer into small sheets that afterwards may be given a tubular shape. The artisans therefore must have known from very old times how to hammer and process this extremely hard material, according to Rehren. From ancient times, iron therefore was associated with something very hard.

In the New Kingdom period, tools and weapon made of iron were rather rare in Egypt, and iron was considered a precious, but rare metal, often used for precious gifts, jewelry and amulets. A well-known example is the beautiful dagger with a blade of iron that was found among the grave goods in Pharaoh Tutankhamen's tomb. This knife probably was a gift from one of the Mesopotamian kings. In addition to the rather sparse finds of iron items from the Late Bronze Age Egypt, ancient Egyptian lists of booty often refer to objects made of iron (Millard 1988:487-88; 1995:195). This indicates that the prevalence of iron tools and iron jewelry may have been more widespread in Egypt that the meager archaeological finds would suggest.

In the 12th Century BC the use of iron for tools and weapon became more prevalent in the Levant and in Egypt, and by the 10th or 9th Century iron had outnumbered bronze as the preferred metal.

In spite of the fact that iron seems to have been a rather infrequent (but highly valued) metal in the New Kingdom period, the Egyptians certainly understood the particular qualities of iron in this period. Iron was known as a hard and very durable metal and was used figuratively for strength, hardness, and invincibility. In the Gebel Barkal stele of Thutmose III (18th Dynasty), the text praises the king for being "a champion, an excellent fortress for his armies, a rampart of iron". ¹⁷ The same expression turns up ca. 200 years later in pharaoh Ramesses II's rebuke of his troops after the battle at Qadesh: "Don't you know in your minds that I am your rampart of iron"? Ramesses II receives a blessing from the god Ptah, saying: "I fashioned your body of electrum, your bones of bronze, your limps of iron". ¹⁹ The metaphorical use of iron in these examples shows that attributes like hardness and invincibility was associated with this metal. The Egyptians of course never constructed any rampart of iron. The notion of iron as a very hard material, however, was so widespread that the imagery of a "rampart of iron" that could not be scaled was considered meaningful.

Also in the Hebrew Bible, בַּרְזֶל ("iron") is used many times (often together with bronze) as an expression for something that is extraordinary hard and strong and cannot be broken. Deut 28:23 threatens that the heaven above will become bronze, and the soil below will become hard as "iron" in case of transgressing the covenant. On the other hand, the blessing of Moses pledges the tribe of Asher that his bars "will be iron and bronze" (33:25). His cities will never be taken due to the strength of the city gate bars (See McNutt 1990:219-23 for further examples of iron as a symbol for unbreakable strength and hardness). Iron "was recognised as the hardest metal in antiquity" (Lindquist 2011:488). Therefore, iron also could be used as a symbol of hard oppression in the Old Testament (McNutt 1990:225-226).

¹⁷ Quoted after W. W. Hallo & K. Lawson Younger, *The Context of Scripture. Vol. II: Monumental Inscriptions from the Biblical World* (Leiden: Brill 2003), 15.

¹⁸ *Ibid.*, p. 37.

¹⁹ Quoted after Millard 1988:489-490.

²⁰ Millard adds some further examples of the symbolic use of "iron" in Anatolia before 1500 BC (1988:491).

From old times, then, iron was used as a symbol to express extreme hardness, durability and impermeability. The Hebrew Bible shares this symbolic representation of iron with the Ancient Near East.

Meaning of the metaphor

When Deut 4 compares the hardships in Egypt with a crucible of iron, it does not refer to the process of smelting and belabouring the iron ore. Instead, the metaphor conveys the impression of a crucible that was made of the strongest and most endurable metal known. Normally crucibles were made of certain types of clays. They could easily be broken by a stroke of bad luck, if the workers were careless, or they could be broken intentionally, if necessary. A crucible could probably also break down by itself due to the intense heat inside it, if it had not been constructed properly from the beginning.

The metaphorical crucible in Deut 4:20 was made out of iron, however. A בַּרְזֶל made of בַּרְזֶל is a device made out of the strongest and most endurable material. It could not be broken, neither by accident nor by the forces of the smelting metal. The metaphor refers to the fact that those who were subject to the slavery, to the forced labor and to the oppression in Egypt could not break away from it by their own means. The conditions were as hard as being inside a burning crucible made of iron.

The metaphor therefore does not allude to the power of transformation in the smelting process (against McNutt and others). ²¹ It does not refer either to the process of refining the metal for impurities (against Merrill *et al.*). ²² On the contrary, the metaphor stresses how impossible it was for Israel to escape the Egyptian slavery by its own means. It was only because of God's most extraordinary endeavor that Israel was taken out of the iron crucible that was Egypt symbolically spoken (4:34). The metaphor serves to stress the extraordinary power of Yahweh in taking Israel out of Egypt.

Conclusion

The surprising metaphor פור "Green crucible" in Deut 4:20 does not describe the slavery in Egypt as an iron-smelting furnace, but in terms of a smelting pot made out of the hard metal iron. The metaphor would have been meaningful to its audience in many periods, both in the postexilic time, in the 7th Century BC, and in the late 2nd Millennium BC for a group of former slaves in Egypt. The metaphor thus in itself tells nothing about the provenance of the catechesis in Deut 4. It signifies how impossible it was for Israel to break out of the harsh conditions in Egypt and the proportions of God's intervention. The phrase stands as a metaphorical expression for the notion of God's strong wonders when he delivered Israel from the slavery, and it serves as a forceful incentive to serve the mighty God who took you out of the iron furnace in order that you might be his personal inheritance.

 $^{^{21}}$ The Old Testament references to the בּוֹר הַבַּרְזָל certainly indicate a transformation of the people of Israel. This transformation, however, does no take place as a result of the experience of being in a metaphorical furnace, but is attributed to God's powerful liberation of his people from that furnace.

²² So rightly Nelson 2002.

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