Does *Genesis* 1:28 Command Birth Control?

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Abstract

What is taken traditionally as God's first commandment to man, "Be fruitful and multiply" in *Genesis* 1:28 is only the first part of a three-part compound sentence, "Be fruitful and multiply and fill the earth and subdue it." This three part sentence

can be read as putting a limitation on the mitzvah of procreation, namely when the earth is filled and subdued. An examination of commentary over the centuries shows that Jewish tradition until very recently did not recognize this limitation. In the past, that the earth could or would ever be filled was so inconceivable, that there was no reason to recognize any limitations on the mitzvah of procreation. However, one recent Torah commentary did say that the commandment has been fulfilled. This paper describes an interpretation of the full three-part sentence that is consistent with the world as it is today: as the earth becomes more and more filled and subdued, mankind needs to slow down being fruitful and multiplying.

1. Genesis 1:28

Genesis 1:28 contains what is traditionally called God's first commandment [N1] to man:

פרו ורבו ומלאו את־הארץ וכבשה

Be fruitful and multiply and fill the earth and subdue it.

This commandment, hereinafter called "TC" for "the commandment" (to avoid confusion with the general term "commandment"), is interesting, because it consists of three commands:

- 1. be fruitful and multiply, and
- 2. fill the earth, and
- 3. subdue it [the earth].

As explained in Sections 2 and 3, the current understanding of TC focuses on Command 1. However, understanding TC fully requires understanding all three commands and their relations to each other. To one who questions tacit assumptions implicit in a text, the question that stands out is "What should be done when Commands 2 and 3 have been fulfilled?" That is, logic dictates that Command 1 can be done repeatedly and is clearly expected to be done repeatedly. The same logic dictates that Command 2 can be done only once. Once the earth is

filled, there is no more room with which to continue to do Command 1. Continuing to pour water into a full cup leads to the water's overflowing. If humans keep making more humans when the earth is full, there is no place for the additional humans, except in outer space [N2]. Likewise, once the earth is subdued, there is no need to continue to subdue it.

It is clear that repeatedly fulfilling Command 1 ends up fulfilling Commands 2 and 3. Since Commands 2 and 3 can be fulfilled only once, perhaps the implication of TC is that Command 1 is to be fulfilled only until Commands 2 and 3 are fulfilled.

Neither TC nor the immediately following text answers the question of what to do when the earth is filled and subdued. Therefore, the rest of the Bible will have to be consulted for guidance about what to do in the circumstance. The rest of the Bible, and its ensuing commentary, make it clear that it is mankind's responsibility to maintain the earth and to make sure that it is not destroyed by mankind's or others' actions. For example, Genesis 2:15 has God placing the man, האדם, in the Garden of Eden to work it and preserve it. Numbers 35:4 orders green belts around cities. Deuteronomy 20:19, known as the law of לא תשחית (Do not destroy!), specifies that there be no wanton destruction of nature even in war. Deuteronomy 22:6–7 says that we may eat baby birds or eggs, but not the mother that is protecting it. Ecclesiastes 7:13 says

ראה, את-מעשה האלהים: כי מי יוכל לתקן, את אשר עותו.

Look at God's work: for who can straighten, what He has twisted.

Kohelet Rabba's commentary [B1] on this verse adds,

When the Blessed Holy One created the first human, He took him and led him round all the trees of the Garden of Eden and said to him: 'Look at My works, how beautiful and praiseworthy they are! And all that I have created, it was for you that I created it. Pay attention that you do not corrupt and destroy My world: if you corrupt it, there is no one to repair it after you. ...'

In other words, perhaps when the earth is filled and subdued and there is no need to continue to be fruitful and to multiply, the laws to protect the earth are the only ones left in force and are, therefore, to be obeyed instead of being fruitful and multiplying [N3]

Perhaps Commands 2 and 3 have already been fulfilled. There are places on earth whose high population density make them feel full to their inhabitants. There are questions being raised about whether the earth can sustain our continued exponential population growth, whether there is sufficient arable land to produce the food needed for the population, especially given the climate change that seems to be happening as a result of our subduction of the earth [B2, B3, B4]. Perhaps humans have successfully subdued the earth and the earth is now crying "Uncle!" or is fighting back with ever more violent weather. Perhaps, therefore, it is time to stop obeying Command 1, to be fruitful and multiply.

The first part of this paper, in Sections 2-4, is devoted to showing that until *very recently*, there was nothing in Jewish tradition that recognized such a limitation, and that even now the limitation is largely ignored. Then, Sections 5-6 show how TC can be read as placing on limit on the duty to procreate. Sections 7-8 consider the limitation in today's context and bring in science to conclude that the time may have come to apply the limitation. Section 9 concludes the paper. An appendix explores the meaning of the Hebrew conjunction 1 for the benefit of readers who are not familiar with the full range of its meanings in *Genesis*.

2. Commentary on TC in Jewish Tradition

The rest of the Bible and the various Jewish commentaries, from the Mishna through to modern day commentary, are examined to see how they are dealing with TC.

2.1. The Rest of the Bible

Other parts of the Bible that touch on procreation, such as Isaiah 45:18,

לא-תהו בראה, לשבת יצרה;

He did not create it [the earth] as a waste, but he formed it to be inhabited;

reinforce the necessity of procreation and make no mention of any limitations.

2.2. Mishna of Yevamot

The Mishna of Yevamot, 6:6 [B5] discusses circumstances under which a man may be unable — as opposed to unwilling — to procreate due to problems beyond his control, for example:

A man should not neglect the commandment of "be fruitful and multiply" unless he already has children. The school of Shammai teaches: two sons. The school of Hillel teaches: a son and a daughter, since it says: male and female he created them." If a man marries a woman and lives with her ten years and they have no children, he cannot neglect it any longer. When he divorces her, she is permitted to marry another. The second husband can wait for her ten more years. If she miscarries we begin the count from the time of the miscarriage. A man is commanded to be fruitful and multiply but not a woman. Rabbi Johanan ben Berukah said: Both are commanded as it says, "And God blessed them and said: 'Be fruitful and multiply:'" [N4]

It totally ignores any suggestion that there might be a commanded limit to being fruitful and multiplying.

2.3. Breishit Rabbah

The commentary of *Genesis* in *Breishit Rabbah* [B6] completely ignores the sentence except to give some interpretation of וכבשה (subdue) on pages 62 and 63:

R. Leazar said the name of R. Jose b. Zimra: *We-kibshuhah* [plural: and do *ye* subdue it] is actually written *we-kibshah* [singular: and do *thou* subdue it]: man is commanded concerning procreation, but not woman. R. Joḥanan b. Beroḥah said: Concerning both man and woman it says, AND GOD BLESSED THEM, etc.

'We-kibsha' (and subdue her) is written: the man must master his wife, that she not go out into the market place, for every woman who goes out into the market place, eventually comes to grief. Whence do we know it? From Dinah, as it is written, And Dinah ... went out, etc. (Gen. xxxiv, 1). R. Isaac said in R. Hanina's name: The law is as stated by R. Johanan b. Berokah.

2.4 Rashi

The commentary of *Genesis* by Rashi [B7] completely ignores the clause about filling the earth. His only comment about TC is

and subdue it: The "vav" [in וְכָבִשָה] is missing, [allowing the word to be read וְכָבַשָּה, the

masculine singular imperative] to teach you that the male subdues the female that she should not be a gadabout (Gen. Rabbah 8:12), and it is also meant to teach you that the man, whose way it is to subdue, is commanded to propagate, but not the woman (Yev. 65b).

In regards to the earlier verse *Genesis* 1:22, where the same phrase פרו ורבו, "be fruitful and multiply," is commanded to animals, Rashi does comment on "be fruitful and multiply":

Be fruitful: [The word ברו is derived from פרי, fruit, meaning produce fruits.

and multiply: If He had said only, "Be fruitful," one would beget one and no more. "And multiply" was therefore said so that one could beget many.

2.5. Ramban

The Ramban has two comments linked to TC [B8]:

28. God blessed them directly saying,[48] "Be fruitful and multiply, fill the earth and have control over it,[49] and have control over the fish in the sea, the birds in the heavens, and all the animals which travel over the earth."

The above is the full *Genesis* 1:28. The comments attached to it in Talmudic style are labeled "48" and "49".

[48] Ramban points out that, in v. 22, the text reads, God blessed them saying, while here it reads, God blessed them and God said to them; hence, he interprets that this is a direct blessing. Since this vayomer is not a creative word but a command, I render "saying." Ling. alt.: God blessed them directly, giving them the power to be ... and to have control.

[49] Ramban specifically takes *vekivshuha* [וכבשה] and *uredu* [ורדו] as synonyms.

Notice that neither of these comments addresses the issue of "fill the earth," מלאו את־הארץ.

2.6. Hershon

In the 1883 *The Pentateuch according to the Talmud* by Paul Isaac Hershon [B9] translates TC as "be fruitful and multiply and replenish the earth and subdue it." In his ensuing discussion, there is no commentary about "replenish the earth". The commentary is about only being fruitful and multiplying and about subduing the

earth. On page 67, the commentary of Verse 28 begins by quoting only,

And God blessed them, and God said unto them, Be fruitful and multiply.

The next part of the text of Verse 28 that is quoted is

And have dominion over the fish of the sea.

"And replenish the earth and subdue it" does not warrant its own section.

Nevertheless, under "And God blessed them, and God said unto them, Be fruitful and multiply.", Hershon says:

I. This precept (which is the first of the 613) is obligatory on man only, and not on woman. Rabbi Yochanan be Berokh says: It is obligatory on both; for it is said: "And God said unto *them*: Be fruitful and multiply." (The above is a Mishnah; and now follows the Guemara.)

II. Whence are these words (the first part of the Mishnah) proved? Rav Ilan said in the name of Rabbi Eliezer ben Shimon: Scripture says (in the same text): "And replenish the earth and subdue it;" it is for man to subdue the earth, and not for woman. But the very word "subdue," is in the plural. Rav Yitzchak replied: It is written וכבשה (in the singular. The punctuation alone constitutes the difference between the plural and singular).

III. Rav Yoseph said: It is proved from Ge. xxxv. 11: "I am God Almighty, be fruitful and multiply" (singular). *Yevamoth*, fol. 65, col. 2.

This commentary quotes "replenish the earth and subdue it", but goes into depth about only "subdue it", basically ignoring "replenish the earth".

Even the subsequent synoptical notes about procreation focuses on only being fruitful and multiplying and mentions no commanded limitations. It does discuss circumstances, such as infertility, under which not being fruitful and multiplying may be *excused*.

2.7. Shapiro

A chapter titled "BE FRUITFUL AND MULTIPLY" by David S. Shapiro [B10] quotes *Genesis* 1:28

God blessed them, and said unto them: "Be fruitful, and multiply, and replenish the earth and

subdue it; and have dominion over the, fish of the sea, and over the fowl of the air, and over every living thing that moves upon the earth."

and goes on to talk about being fruitful and multiplying with no commanded limitations.

The chapter later quotes Exodus 1:7 as saying

The children of Israel were fruitful and prolific, they multiplied and increased very greatly, so that the land was filled with them.

This quote using the words "the land was filled" ותמלא הארץ with the same roots as "and fill the earth" ומלאו את־הארץ, makes it clear that the meaning ascribed to filling the earth did not extend to stopping the commandment of being fruitful and multiplying. The Hebrews continued to be fruitful and continued to multiply past the date described by Exodus 1:7.

2.8. Schweid

The 2009 English translation, *The Philosophy of the Bible as Foundation of Jewish Culture*, of Eliezer Schweid's Hebrew language book [B11], says:

Two imperatives are incumbent on him [the human being] to carry out his task. The first is embodied in his animal nature, and like the animals he is blessed/commanded: "Be fruitful and multiply and fill the earth." (Gen. 1:28) The second has its source in the divine spirit that was breathed into him: "Subdue the earth, and rule the fish of the seas and the fowl of heaven and all living creatures that crawl on the earth."

There is nothing in here about any limitations on procreation. In fact, in this commentary, "fill the earth" seems to been totally eclipsed by the "be fruitful and multiply" and by "subdue the earth".

2.9. Chabad

Chabad's Web site has an article titled "Be Fruitful and Multiply" by Aryeh Citron [B12]. It immediately quotes parts of *Genesis* 1:28, including part of TC, and others:

The first mitzvah in the Torah is "to be fruitful and multiply." As the verse in Genesis states: "And G-d said to them, 'Be fruitful and multiply and fill the earth..." After the Flood, G-d repeated this commandment to Noah: "And G-d blessed Noah and his sons, and He said to them: 'Be fruitful and multiply, and fill the earth."

The first subsection, titled "The Basic Mitzvah" describes the details of being fruitful and multiplying including the number of sons a man should have. There is *no* mention of any commanded limitation. There are subsections dealing with reasons that one may not be able to obey the mitzvah, namely in subsections titled "Infertility" and "One who is Unable to Have Children", but these are not commanded limitations.

2.10. Summary of Commentary So Far

In the above cited commentary, Judaism appears to be habitually not quoting the entire TC, of quoting only a part of it, namely Command 1. While Command 3 is occasionally cited, Command 2 is often totally ignored.

2.11. Friedman's Modern Commentary

In 2003, Richard Elliott Friedman published *Commentary on the Torah*, with a New English Translation and the Hebrew Text [B13]. Friedman tries in his translation to follow the ancient Hebrew idiom accurately with modern English. His translation of TC is simply and appropriately enough:

1:28. Be fruitful and multiply and fill the earth.

1:28. subdue it and dominate.

Friedman divides the translation of TC into two parts, in order to be able to give a commentary to each part. His comment on the first part is short and to the point!

This commandment has now been fulfilled.

His comment on the second part is:

Incredibly, some have interpreted this command to mean that humans have permission to abuse the earth and animal and plant life—as if a command from God to rule did not imply to be a *good* ruler!

These comments run counter to all others that preceded them. These comments were quoted and amplified in the chapter titled "The Earth" in the 2011 book *The Bible Now* [B14] by the same Richard E. Friedman and Shawna Dolansky. Apart from this quotation and amplification, these comments appear to have been ignored in Jewish commentary [N5].

3. Google Search

Most references to TC in English quote only the first part of the sentence, "Be fruitful and multiply". The focus seems to be on explaining a commandment to procreate and in justifying prohibitions, e.g., in the Catholic Church, against inhibiting or obstructing in any way this procreation. It is used to justify prohibitions, e.g., in the Catholic Church, against any form of birth control other than abstinence [N6], which itself is discouraged as less desirable than procreating.

Evidence for this claim is that a Google search [N7] of the quoted phrase "Be fruitful and multiply" on 2 January 2017 yielded 407,000 hits. However, a Google search of the quoted phrase "Be fruitful and multiply and fill the earth" on the same date yielded only 88,000 hits, about 21.6% of the number of hits for "Be fruitful and multiply". A Google search of "Be fruitful and multiply and fill the earth and subdue it" yielded even fewer hits, only 54,700. So, the culture seems to ignore the full sentence and seems to focus on only being fruitful and multiplying [N8]. The Google search results make it clear that even the non-Jewish world is focused on only "Be fruitful and multiply." and is largely ignoring the rest of TC.

4. Why A Limitation Made No Sense in the Past

Consideration of the world's situation at the time the early commentaries given in Section 2 were written makes it clear that the notion that the earth could be filled any time soon was sheer nonsense, so much so that the notion was not worth any commentary. Indeed, natural disasters, such as the flood and the seven years of famine, and attempts at genocide, such as Pharaoh's edict that all male Hebrew newborns were to be killed, were frequent and severe enough that it was clear that humans *needed* to be fruitful and multiply.

The Torah: A Women's Commentary translates TC as "Be fruitful and multiply; fill the earth and tame it;" [B21] Its commentary on TC says: "The harsh conditions and fragility of life in the ancient world make fertility a most valued gift and necessity. The plain sense of the text is that this 'first commandment' is issued to both female and male."

As an example of the perception of the fragility of life, in *Genesis* 19:30–38, Lot's two daughters thought that Lot and they were the last three people on earth when they procreated with Lot, their father, after the destruction of Sodom and Gomorrah.

However, recently, it has become clear that humans could indeed be filling the earth, reaching the earth's capacity to support life, and that humans could indeed be subduing the earth to the point of permanent damage to the planet or to the point that the earth is fighting back with ever increasingly violent weather. Therefore, a phrase of the Bible that seemed totally irrelevant at the time traditional commentaries were written has become *very relevant*. It is necessary to reassess the meaning of TC based on what has only recently become clear.

5. The Syntactic Structure of TC

There is plenty of evidence [B25], summarized in the appendix of this paper, that in *Genesis*, the 1, which is normally understood in modern Hebrew as meaning "and", was understood at the time of the writing of *Genesis* as meaning a variety of conjunctions and prepositions, including "in order to". On this basis, TC can be read as:

(Be fruitful) in order to (multiply) in order to (fill the earth) in order to (subdue it).

In other words, the achievement of each non-first command is the *goal* of doing its predecessor command. However, a variety of different structures can be imposed by reading the normal "and" for 1 at any point. Traditionally, אורבו has been taken as a unit, and it makes sense to consider מלאו את הארץ וכבשה as a unit because of the implied pronoun "her" ("it" in English) in הארץ וכבשה (neutral "earth" in English). Therefore, a reasonable structure for TC is:

((Be fruitful) and (multiply))

in order to

((fill the earth) and (subdue it)).,

That is, the goal of being fruitful and multiplying is to fill the earth and subdue it. This structure fits the understanding of TC espoused by this paper.

In modern Hebrew, "in order to" might be expressed as "until," because once one's purpose for doing something has been achieved, he or she can stop doing the something. Thus, in modern Hebrew, TC might be rendered:

פרו ורבו עד שאתם תמלאו את־הארץ ותכבשה

Be fruitful and multiply *until* you fill the earth and subdue it.

6. A New Understanding of TC

Perhaps, the author of *Genesis* [N9] was anticipating a time in the future in which the earth would be filled and subdued and wrote TC in *Genesis* 1:28 so that it had its own sunset clause, when the command to be fruitful and multiply would have to cease to be obeyed. A literal reading of the whole of TC is that it commands both

1. procreation

2. exercising restraint on the procreation, i.e., birth control, when the earth is filled and is subdued.

Barring a catastrophe at the time of filling or thereafter, filling the earth can be done only once. Therefore, it could be argued that only the persons who would produce children after the earth is filled need to practice birth control.

However, a fairer interpretation is that as the earth gets closer and closer to being filled and subdued, *everyone* has to practice this restraint to slow down the procreation, perhaps to achieve a steady state of procreating only to replace the dying. This interpretation distributes the procreation and the restraint over the entire population. In addition, it is probably unwise to wait until there is no space left for a new person; the earth will have run out of other resources, such as agricultural land, long before that time [B2, B3].

Of course, if at any time before, or even after, the earth is filled, a catastrophe, such as a repeat of the Noachian flood, were to decimate the earth's inhabitants, then TC would once again have to be interpreted as it has been, with a focus on being fruitful and multiplying.

7. For the Future

One can only marvel at the foresight and wisdom of the author of the Torah who placed a natural limit on being fruitful and multiplying, namely when the earth is filled and subdued. This sense of marvel is only increased with the realization that mankind did not see and understand until recently that filling and subduing the earth is indeed possible.

The human inhabitants of the earth need to have a general discussion addressing the following issues:

- 1. Are humans filling and subduing the earth?
- 2. Are humans about to fill and subdue the earth?
- 3. Have humans already filled and subdued the earth? [N10]

If the answer to any of these questions is "Yes", then mankind needs to have a discussion to decide what to do with TC of *Genesis* 1:28, that is to decide how fruitful and multiplying to be and how limiting of these to be. That is, mankind needs to decide on a balance between procreation and birth control that is appropriate given its answers to Questions 1, 2, and 3.

Some possible balances include:

- 1. achieving a much slower, but still positive, population growth,
- 2. achieving a steady state in which births match deaths, and the population does not change, and

3. achieving a population reduction.

To decide between these different balances, additional science is needed to predict the effects of population, population growth, and population reduction on humans, animals, plants, the environment, and the earth in general. Then, mankind will need to decide where on the passive—active spectrum it needs to be on procreation and on birth control to achieve the chosen balance.

An important issue for Jews to consider is that, more so than other peoples, they have been the target of extermination attempts, the most recent attempt succeeding to decimate six million of them. Should Jews exempt themselves from the balancing birth control, at least temporarily, until they have achieved the population that they would have had they not been the target of extermination efforts? On the other hand, as observed by Rabbi Lori Cohen, *Deuternomy* 7:7 says,

It is not because you are the most numerous of people that the Lord set his heart on you and chose you

This quotation suggests that Jews are destined to be a small part of the world population anyway. Still on the same other hand, Jews have always been at the forefront of efforts for tikkun olam (תיקון עלם), repairing the world. Balanced procreation and birth control are certainly aimed at repairing the world, repairing it from being filled and subdued. So, to set a proper example, maybe Jews should *not* exempt themselves.

8. Science Attempts to Answer The Question "Have We Filled the Earth?"

There is a lot of scientific evidence that indeed the earth has reached its capacity with respect to human population [B2, B3]. In addition, the recently developed concept of *ecological footprint* [B22, B23, B24] suggests that mankind indeed already filled and subdued the earth and gives an estimate of by how much it has done so. The ecological footprint is calculated from data gathered by the United Nations for its own purposes, and it is a standardized measure of mankind's demand on the earth's ecosystem. It compares mankind's demand for the earth's capital resources against the earth's ecological capacity to regenerate them. The ecological footprint's unit is "earths", as it tells how much of the earth or how

many earths are needed to supply the resources mankind consumes and to properly assimilate the waste that mankind produces. In 2007, the ecological footprint was calculated as 1.5 earths [B22, B23, B25]. That is, in 2007, mankind was already using the earth's resources 1.5 faster than the earth can provide them from its original or renewed supply. Moreover, if the population and consumption continue to grow at the current rates, by 2030, the ecological footprint is estimated to be 2 earths [B25]. That is, a whole new planet is needed to accommodate mankind. Of course, this whole new planet is not available.

The growth of the ecological footprint is a lot worse than most people perceive based on their experience. The problem is that the ecological footprint grows as the population grows, and the population grows not linearly, but exponentially. Therefore, if in the last 100 years, the population grew from 1 billion to 2 billion people, then in the next 100 years, the population will grow *not* to 3 billion, but to 4 billion people. That is, if in the last 100 years, the population has doubled, it will double again in the next 100 years.

Humans are not good at forecasting exponential growth. Their gut feelings appear to operate linearly, based on past experience. That is, if in the last 100 years, the population grew from 1 billion to 2 billion people, then the gut feelings predict that in the next 100 years, the population will grow to only 3 billion. Figure 1 shows two plots on one graph. The horizontal axis of the graph is time, and the vertical axis is population. The thick, dashed plot labeled "Actuality" shows exponential population growth. Assume that mankind is at Point "Now" in time. At any time, a human has only recent history, his or her lifetime, by which to intuitively understand a phenomenon. In that recent history, the population generally appears to be in a steady, more or less linear growth, growing approximately the same amount, plus or minus, per year. He or she extrapolates that feeling as the straight thin, solid plot labeled "Gut Feeling". He or she does not observe that recent population growth is faster than ancient population growth, for the simple reason that he or she has no memory of ancient growth. However, population grows as the upwards-curving "Actuality" plot, which grows significantly faster than the "Gut Feeling" extrapolation. In fact, the amount by which a human underestimates the actual population growth grows larger with each passing unit of time.

Thus, the situation is a lot worse than mankind realizes, and limiting population

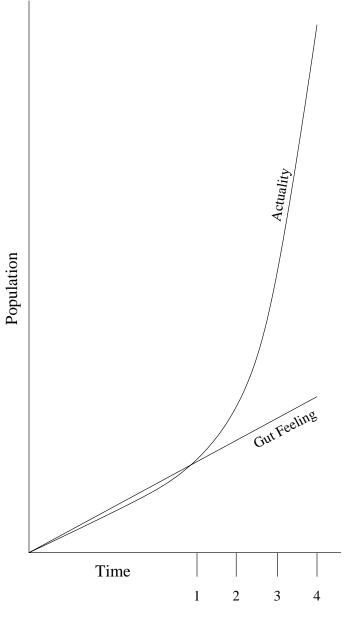


Figure 1

growth gets more and more, more essential, if not critical, with each passing day.

9. Conclusions

Genesis 1:28 has always said:

פרו ורבו ומלאו את־הארץ וכבשה

Be fruitful and multiply and fill the earth and subdue it.

In the past, it may have been reasonable to ignore "and fill the earth and subdue it" in favor of "Be fruitful and multiply". There was no chance that the earth would be filled or subdued any time soon. Nevertheless, the full commandment must be understood, and it must be understood as putting a natural, common sense limit on being fruitful and multiplying, i.e., when the earth is filled and subdued.

Today, there is growing evidence that the earth is rapidly approaching being filled and subdued, if it is not already so, perhaps irreparably so. Hence, it may be time to regard TC, "Be fruitful and multiply, and fill the earth and subdue it." as commanding an earth sustaining balance of procreation and birth control.

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Appendix. Various Meanings of 1

The key to understanding TC is understanding the meanings of the 1s that are contained in it. In Hebrew, the 1 is a conjunction, i.e., a part of speech which joins syntactic units such as words, phrases, or clauses. It is most commonly thought of as equivalent to English "and", and in certain contexts, to "but" or "or". In reality, Biblical Hebrew's 1 covers a great deal more territory, at least from an Indo-European point of view. It is important to be *consciously aware* of the various options available in translating this conjunction lest we prejudice the interpretation

of Biblical Hebrew text as a result of grammatical tunnel vision.

Choon-Leong Seow's standard introductory text on Biblical Hebrew [B26] identifies six different usages of 1 and gives examples of each [N11]:

A.1. Copulative 1 and its variants

The *copulative* 1 has several variants, the simple, the adversative, and the alternative.

The *simple* 1 is best represented in English by "and". Some examples of it from the Tanakh are:

a. Genesis 1:1

בראשית ברא אלהים את השמים ואת הארץ in a beginning, God created ((the heaven) and (the earth))

Here, the 1 joins two noun phrases, which together form the direct object of the verb.

b. Genesis 1:2a

והארץ היתה תהו ובהו

and (the earth was ((formless) and (void)))

The first 1 is used to join the following sentence in a narrative sequence from the preceding sentence to the following sentence, while the second 1 joins two adjectives to form the adjectival complement of the verb. Seow treats this simple use of 1 using a dozen of his own examples early in his book, on Pages 58–59.

One variant of the copulative 1 that joins two sentences in a narrative sequence is the consecutive 1, which occurs as a prefix to a verb in perfect (past tense) or imperfect (future tense). The effects of such a 1 are to (1) to establish the narrative sequencing and (2) invert the tense of the verb, changing the perfect to imperfect and vice versa. The first example of a consecutive 1 in the Tanakh is:

c. Genesis 1:3:

ויאמר אלהים יהי אור ויהי-אור

and (God said there will be light) and (there was light)

The two is establish a narrative sequence. In addition, the first i converts the imperfect form יאמר to past tense, and the second i converts the imperfect form to past tense. Note that the earlier occurrence of יהי is not prefixed by i; so it remains in future tense.

A variant of the general copulative 1 is the *adversative* 1, in which case, either the items being joined are either explicitly opposed, e.g., when the second is marked with \aleph 0, or the semantics require it. On Page 284, Seow offers the example:

d. Kohelet 4:13a

טוב ילד מסכן וחכם

good is the boy ((poor) and (wise))

good is the ((poor) but (wise)) boy

It is hardly good to be poor *and* wise.

The other variation of the copulative 1 is the *alternative* 1, which deals with items which are somehow mutually exclusive. An example cited by Seow (284) is:

e. *Exodus* 20:9

ויום השביעי שבת ליהוה אלהיך לא תעשה כל מלאכה אתה ובנך ובתך עבדך ואמתך ובהמתך וגרך אשר בשעריך

and (the seventh day is a sabbath to your God; will not do any work: ((you) and (your son) and (your daughter) and (your male servant) and (your female servant) and (your animal) and (your stranger that is within your gates))

but (the seventh day is a sabbath to your God; (neither (you) nor (your son) nor (your daughter) nor (your male servant) nor (your female servant) nor (your animal) nor (your stranger that is within your gates) will do any work)

The first 1 is another example of joining two sentences in a narrative sequence, but in this case, what follows the 1, namely "the seventh day", is distinguished from the rest of the days. The remaining 1s in the example form a logical expression, not (A and B and C and D and E and F and G),

which can be expressed more naturally as

neither A nor B nor C nor D nor E nor F nor G, which, in turn, can be expressed even more naturally as neither A, B, C, D, E, F, nor G.

A.2. Explicative 1

An *explicative* 1 is one for which the phrase following it provides amplification to the phrase preceding it. Consider Seow's example on Page 284:

f. 1 Samuel 17:40a:

ויקח מקלו בידו ויבחר לו חמשה חלקי אבנים מן הנחל וישם אתם בכלי הרעים אשר לו ובילקוט

and (he took his stick in his hand) and (he chose for himself five pieces of stone from the river) and (he placed them ((into the shepherd's tool that he had) and (into his bag))

and (he took his stick in his hand) and (he chose for himself five pieces of stone from the river) and (he placed them ((into the shepherd's tool that he had) that is (into his bag))

The explicative 1 is the last 1 in the example. Clearly, David (the "he" in the narrative) did not put the five stone pieces into two separate locations; he put them into only one. The phrase after this 1 is a gloss on the phrase before this 1, explaining that the shepherd's tool that he had was his bag. Thus, this 1 should be translated as "that is".

A.3. Circumstantial 1

A *circumstantial* 1 joins clauses that describe contemporaneous events. Seow offers the following examples on Pages 232 and 284:

g. Genesis 19:1a

ויבאו שני המלאכים סדמה בערב ולוט ישב בשער סדם

and ((the two angels came towards Sodom in the evening) and (Lot sat at the gate of Sodom))

and ((the two angels came towards Sodom in the evening) while (Lot sat at the gate of Sodom))

The second 1 is the circumstantial one. Translating it as "and" might give the impression that the text is talking about unrelated events, but in fact, the events are connected and *are happening at the same time*. Therefore, this 1 should be rendered

"while" for a more meaningful translation.

h. Genesis 45:14

ויפל על צוארי בנימן אחיו ויבך ובנימן בכה על צואריו

and (he fell upon the neck of Benjamin his brother) and ((he wept) and (Benjamin wept upon his neck))

and (he fell upon the neck of Benjamin his brother) and ((he wept) as (Benjamin wept upon his neck))

Seow suggests "as" for translating the second and circumstantial 1, but one might view Benjamin's action as a response to one initiated by Joseph (the "he" in the narrative). Perhaps, "and in response," would be a better translation.

i. 2 Kings 8:7a

ויבא אלישע דמשק ובן הדד מלך ארם חלה

and ((Elisha came to Damascus) and (Ben-Hadad, king of Aram was ill))

and ((Elisha came to Damascus) when (Ben-Hadad, king of Aram was ill))

The circumstantial 1 is the second one. In this instance, the subsequent context reveals that the clause about Ben-Hadad—an independent comment relative to Elisha's coming to Damascus—is introduced to provide a backdrop for the subsequent narrative. A translation of "when" or, even better, "at a time when", seems appropriate.

j. Deuteronomy 5:19a

ויהי כשמעכם את הקול מתוך החשך וההר בער באש

and ((it happened that when you heard the voice from within the darkness) and (the mountain burned with fire))

and ((it happened that you heard the voice from within the darkness) while (the mountain burned with fire))

Here, the combination of (1) \supset , literally "when", in front of שמעכם, and (2) the subsequent 1, means "while" in the place of the second and circumstantial 1.

In each of the examples (c) through (j), translating the salient 1 as "and" might be acceptable. However, "and" makes a rather wooden translation in English. It is clear that a good rendering of 1 is not just a matter of syntax. It is equally a matter

of taking into account the semantic overtones of the clauses concerned and their

relations to one another.

A.4. Commands in narrative sequence

Seow also has, starting on Page 243, a short section on commands in a narrative sequence, which is the form of TC. Several of his examples are directly pertinent to understanding TC:

k. Isaiah 55:1b

לכו שברו ואכלו ולכו שברו בלוא כסף ובלוא מחיר יין וחלב

((come buy) and (eat)) and (come buy ((without money) and (without price)) ((wine) and (milk)))

((come buy) in order to (eat)) and (come buy ((without money) and (without price)) ((wine) and (milk)))

The text preceding the example is about thirsty people, and שבר means "to buy" with the assumption that what is bought is edible. Translating the first 1 as "and" is acceptable, and many translations do just that. However, it is clear that one cannot eat until one has bought something to eat, i.e. the eating is contingent having obtained something to eat. Hence, this 1 is better translated as "in order to". Each of the other 1s in the example is copulative.

1. Genesis 47:19b

ותן זרע ונחיה ולא נמות והאדמה לא תשם

and ((give seed) and (we will live and we will not die) and (the soil will not be barren))

and ((give seed) in order that (((we will live) that is (we will not die)) and (the soil will not be barren)))

The first 1 is copulative at the sentence level. The second 1 really means "in order that" because living and the soil's not being barren is contingent on having gotten seed to plant in the soil in order to grow food and feed livestock; growing food and feeding livestock, in turn, ensure that the "we" will live. The third 1 is explicative, explaining that living is not dying. The fourth 1 is actually copulative at the clause level, saying that a consequence of our getting seed, other than our living, is that the soil will not be barren. This copulative nature of the fourth 1 is clear from the

parentheses in the presented translation, parentheses which are not normally present in writing. To make the meaning clear in normal writing, a translation should repeat the "in order that" after an "and" translation of the fourth 1:

and ((give seed) in order that ((we will live) that is (we will not die)) and in order that (the soil will not be barren))

m. Ruth 1:9a

יתן יהוה לכם ומצאן מנוחה אשה בית אישה

(The Lord will grant you (pl.)) and (you (pl) will find rest, each woman in the house of her man) (The Lord will grant) that (you (pl) will find rest, each woman in the house of her man)

Translating the 1 as "and" simply does not work, because doing so leaves it unspecified what the Lord is granting to the two women. In each of the first three examples of commands in a narrative sequence, translating 1 as "and" does work, but in this example, translating 1 as "and" does not work. Some kind of alternative must be used. Seow suggests "so that", but sometimes "in order to", "in order that", or just plain "that" works better.

In each of most examples cited thus far, 1 has effectively joined items, whether words, phrases, or clauses, at the same structural level, that is, in a coordinating fashion. However, in the example from *Ruth*, the 1 effectively amounts to a subordinating conjunction (a.k.a., a *subjunction*), *from the English viewpoint*. It is important not to project modern linguistic frameworks onto an ancient language whose speakers may or may not have made the same distinctions.

A.5. Statistics on 1 in Genesis 1—11

There are 823 instances of the conjunction 1 in *Genesis* 1—11. An analysis of each of these 1s, with a conservative leaning towards maintaining "and", yields the following counts for each meaning:

"and"—796 instances which could fairly naturally be rendered "and" or something similar, such as "as well as", or which serve as a consecutive 1.

"as for"—1:

Genesis 9:9

ואני הנני מקים את בריתי אתכם

as for me (here I am, establishing my covenant with you)

This interpretation is needed, because the preceding text outlined the obligations upon Noah and his descendants in a sentence structured like this one.

"but"—10:

Genesis 2:6.1 has א' in previous clause but not the current one; Each of Genesis 2:20.11, 3:3.1, 4:5.1, and 4:7.5 has א' in the current clause, but not in the previous one. Each of Genesis 4:7.13, 6:8.1, 6:18.1, 8:1.1, and 11:31.25 is in semantic contrast with the previous clause.

"nor"—1:

Genesis 3:3.11 has לא in the current clause and also in the preceding one.

"now"—1

The 1 in *Genesis* 3:1.1 could translated as "and", but there is a break in the narrative, a term is needed that makes the break clear. Probably there are other instances among the 796 "and" interpretations that mark similar clear breaks in the narrative.

"so that"-5

Genesis 2:7.13

וייצר יהוה אלהים את האדם עפר מן האדמה ויפח באפיו נשמת חיים ויהי האדם לנפש חיה

and (The Lord God formed the human, soil from the ground) and (He breathed into its nostrils the soul of life) so that (the human became a living being)

Here, "and" would work for the third 1, but it is clear that the final clause describes the consequence of God's two previous actions taken in sequence.

Genesis 6:2.10

ויראו בני האלהים את בנות האדם כי טבת הנה ויקחו להם נשים מכל אשר בחרו

and (the sons of the gods saw that the daughters of the man were fair) so that (they took for themselves wives from among them, according to his choice)

Genesis 6:4.16

הנפלים היו בארץ בימים ההם וגם אחרי כן אשר יבאו בני האלהים אל בנות האדם וילדו להם

and (the Nephilim (giants) were on the earth in those days) and (also afterwards, the sons of the gods will go into the daughters of the man) so that (they will bear children to them)

The passage is somewhat obscure. Nevertheless, it is clear that the reason that the sons of the gods will go into the daughters of the man is so that the daughters will bear children for the sons.

Genesis 3:5.8

כי ידע אלהים כי ביום אכלכם ממנו ונפקחו עיניכם והייתם כאלהים ידעי טוב ורע

(for God knew that on the day that you eat from it) that (your eyes will) so that (you will be as God, knowing ((good) and (evil))

This sentence has three 1s. For the first use, a mere "and" cannot possibly work; a "that" is needed. For the second, the "so that" makes it clear that what follows is a consequence of the opening of the eyes. The third is a simple copulative "and"; although "from" would work as well.

Genesis 8:17

כל החיה אשר אתך מכל בשר בעוף ובבהמה ובכל הרמש הרמש על הארץ הוצא (היצא) אתך ושרצו בארץ ופרו ורבו על הארץ

(every living animal that is with you, from each flesh including bird and animal and each creeper that creeps on the earth, bring out with you) so that (they will swarm over the earth) and (be fruitful) so that (they will multiply on the earth.)

There are several is in the sentence, most of which are simply the copulative "and". It is obvious, however, that the various creatures are being saved in order that they will be able to resume their earthly activities when the flood is over.

"that"—7

Genesis 3:5.8; that is, the last "so that" example has also a "that".

Genesis 4:3.4

ויהי מקץ ימים ויבא קין מפרי האדמה מנחה ליהוה

and (it happened after several days) that (Cain brought from the fruit of the ground an offering to to the Lord)

Genesis 4:8.9

ויאמר קין אל הבל אחיו ויהי בהיותם בשדה ויקם קין אל הבל אחיו ויהרגהו and (Cain spoke to Abel his brother) and (it happened while they were in the open field) that (Cain (rose up against his brother Abel) and (killed him))

Genesis 7:10.4

ויהי לשבעת הימים ומי המבול היו על הארץ

and (it happened in the seven days) that (the floodwaters were over the earth)

Genesis 7:19.7

והמים גברו מאד מאד על הארץ ויכסו כל ההרים הגבהים

and (the water was so very very victorious over the land) that (it covered all the tall mountains.)

Genesis 9:14-15.1

והיה בענני ענן על הארץ ונראתה הקשת בענן וזכרתי את בריתי

and (it will be when I will cloud clouds over the earth) and (the rainbow will be in the cloud) that (I will remember my covenant)

Genesis 11:2.4

ויהי בנסעם מקדם וימצאו בקעה בארץ שנער

and (it happened while they journeyed from the east) that (they found a valley in the land of Shinar)

"then"—1

Genesis 4:24.5

כי שבעתים יקם קין ולמך שבעים ושבעה

(if seven times avenged will be Cain) then (Lemech seventy-seven times)

The 1 in this case introduces the apodosis following the protasis.

"when"-2

Genesis 5:6.7

ויחי שת חמש שנים ומאת שנה ויולד את אנוש

and (Sheth had lived 105 years) when (he fathered Enosh)

Genesis 7:6.6

ונח בן שש מאות שנה והמבול היה מים על הארץ

and (Noah was six hundred years old) when (the flood brought water over the earth.

A.6. Summary

The evidence is that any 1 conjunction can correspond to any of "and", "but", "or", "that is", "while", "in response to", "in order that", "so that", and "that". In most cases, the choice amounts to the difference between literalism and polished style, but in at least one case surveyed, a subordinating function is necessarily called for in translation.

Upon reflection, it becomes apparent that English speakers occasionally use "and" with at least some of the same additional meanings, at least in colloquial speech. The flowery language used by traditional translations of the Bible notwithstanding, ancient Hebrew writers to a large extent wrote familiarly or colloquially rather than formally.

Consider the following instruction in English:

Get dressed, and go to the store!

This instruction can be parsed as:

(Get dressed,) and (go to the store.),

that is, as a sequence of two imperative clauses joined by a coordinating conjunction, "and", and at first glance, this parse seems fine. However, it is clear that the instruction is talking neither about separate, disconnected events nor simultaneous events. The instruction really has a premise and a consequence. Certainly, there are two events, but the first command is issued *specifically* in order to make the second command possible, and in fact, with the main intent that the second command be *carried* out.

Finally, Seow notes on Pages 111—112 that אשר, which normally means "that" or "which" and is normally used to introduce subordinate clauses, is occasionally used as a conjunction. One must be careful when considering the meanings of any connective word in the Tanakh.

End Notes

[N1] Some take *Genesis* 1:28 not as a commandment, but as a blessing, if for no other reason than that *Genesis* 1:28 begins with "And God blessed them," referring to Adam and Eve. However, a glance at the commentaries of Section 2 shows that most in the Jewish tradition consider *Genesis* 1:28 to be a commandment.

[N2] People have gone to space, but to date and for the foreseeable future, transferring enough of the earth's population to relieve overcrowding is just not feasible.

[N3] One possible problem with the interpretation offered in this paper for the Commandment is that a similar commandment is given to animals in *Genesis* 1:22:

ויברך אתם אלהים, לאמר: פרו ורבו, ומלאו את-המים בימים, והעוף, ירב בארץ.

And God blessed them, saying: be fruitful and multiply, and fill the water in the seas, and the fowl, will multiply in the earth.

While God commands sea animals to be fruitful and to multiply and to fill the sea, He does not tell the sea animals to conquer the sea. God tells fowls to multiply but does not place any limit on this multiplication. However, later, in *Genesis* 1:28, after TC, God gives mankind dominion over animals, in effect depending on mankind to limit the population growth of animals.

[N4] Certainly, the notion of an unlimited command to "be fruitful and multiply" is as outdated as the notion that the command applies to only men! The male-gender-centric interpretation of many of the commentaries on the command is a topic for a whole other study.

[N5] A Google search of the sentence "This commandment has now been fulfilled." finds, on 15 November 2016, only three hits:

- 1. the book, On Earth as It Is in Heaven: Cultivating a Contemporary Theology of Creation, by David Vincent Meconi S.J. [B15],
- 2. the review "It took some chutzpah for author to write one-man commentary on Torah" by Richard N. Ostling [B16], and
- 3. a collection of three full commentaries on Chapter 1 of Genesis by three authors, Robert Alter, Friedman, and Nahum Sarna, in the Web site of

Rabbi Shammai Englemayer [B17],

each of which quotes the sentence in full. Each of the first two hits is written from Christian viewpoints, identifies Friedman's commentary on TC as from a Jewish source, and appears to agree with it. The third hit is not focused on Friedman's commentary on TC per se; the page is used to provide a variety of translations, comparison charts, commentaries, and essays about all chapters of Genesis for Jewish education at the Rabbi's Conservative synagogue. To find these hits, one has to know the exact quotation.

Also, as part of the effort to find all Jewish commentary concerning TC, the first author asked his Judaically knowledgeable friends and the rabbis he knew if they knew of anything in Judaism that specifically addresses the phrase אחריה הארץ, "and fill the earth," as a commanded limit on being fruitful and multiplying. Everyone said, "No". The two of these people who knew of Friedman's Commentary on the Torah book [B13] had not seen its specific comments on TC. Even we did not find Friedman's comments while looking for comments on TC! The first author was studying Friedman's translation of and comments on Genesis 1:1 and only happened to glance at the nearby translation of and comments on Genesis 1:28. Therefore, it appears that Friedman's comments on TC is largely not yet known in Judaic culture, owing, probably, to the fact that each of Friedman's publications that mentions his comments on Genesis 1:28 features nothing about Genesis 1:28 in its title.

Thus, one of the purposes of this article is to help get the word out about the limitation that is part of TC by having an article whose title directly attributes this limitation to Genesis 1:28. Doing so will help Friedman's comments on TC to become better known.

[N6] Strictly speaking, also abstinence, especially in married couples, should prohibited, simply because it goes against being fruitful and multiplying.

[N7] The use of Internet search, such as provided by Google.com, to determine societal trends is well established [B18]. For example, search engine query data have been used for early detection of flu epidemics [B19]. No less than Richard E Friedman and Shawna Dolansky [B14, page 42] have

used a "quick Internet search" for a phrase to demonstrate the extent to which the phrase is the subject of debate.

[N8] Interestingly, a Google search of the phrase "Be fruitful, and multiply, and replenish the earth", the King James's [B20] translation of the original Hebrew, yielded 968,000 hits, about 1.7 times the number of hits for the more direct, more popular of the Jewish translations of the original Hebrew with "fill the earth." The King James's translation is more widely quoted than the more popular Jewish translation.

[N9] The orthodox Jewish tradition is that the Torah is the word of God.

וזאת התורה אשר שם משח לפני בני ישראל, על פי אדוני ביד משה.

"This is the Torah that Moshe put before the Children of Israel, according to the word of God, by the hand of Moshe."

[N10] Each author's personal opinion is that the answers to Questions 1 and 2 are "Yes" and that the answer to Question 3 is "We are very close!"

[N11] The translations given here of Seow's examples are the authors' rather than Seow's. The translations given here use parentheses for scoping and, sometimes, Hebrew word order to better illustrate structure of the the original Hebrew. Also, when more than one translation is given for an example, the first is very literal, using only "and" for any 1, and the rest are better translations using the identified intended meanings for any 1.

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