About quantising unconscious decision processes and their origin and proving Intelligent Design

Martin K. Dubreuil¹, Sergii Koliada

April 4, 2014

Abstract: Prompted by previous research results we analysed human decision processes for unconscious patterns. Like former studies [1, 2] we were able to find law-like patterns that were not consciously created. We calculated the residual uncertainty about the pattern to 1: 1,000,000,000 and proved a high correlation ratio for the data source related to the found pattern through an intra class correlation test (3.2). We showed that conscious (3.3) and unconscious human behaviour and natural selection (3.4) are not able to explain this result. So also some kind of Intelligent Design must be supposed (3.4).

Contents

1 1 1 1

1	mtro	duction	1
2	Defi	ning the data source and the shape of the pattern	2
3	Resu	lts	4
	3.1	The pattern itself	4
	3.2	Proving the pattern	7
	3.3	Origin	0
	3.4	Intelligent Design	2
4	Appe	endix A	3
5	Appe	endix B	6
6	Appe	endix C	8
R	eferen	ces	0

1 Introduction

Some time ago we initiated a contest between students, about who was able to create the most random data, with a price to win. We first used the gained data set for intraclass and interclass analysis. Then we searched for other unusual characteristics. There were 318 bit strings entered with an average length of 80 digits. We discovered, that not a single time 000000000 or 111111111 were entered. By assuming true randomness for 318*80 = 25440 digits, we should have found a bit string composed of exact 8 equal digits about 100 times. The probability for a sequence like 000000000

¹ Corresponding author: MartinDubreuil@t-online.de

(0.5)^8 = 1 : 256. For a single sequence of 80 digits it is unlikely that a row of 8 equal digits appear in it. But for a row of 318*80 = 25440 digits it is very unlikely that there is no row of 8 equal digits. We assumed this was caused through the intention to produce high quality random data by the students. It is unlikely that eight equal digits are contained in a short row of 80 digits, so no one entered this sequence. We asked a few students afterwards under which conditions they decided to enter a "0" or "1" to produce a random bit string. Most of them answered, not to have thought about a specific pattern while entering the bit string and just pressed the "0" and "1" button how they "felt" at this moment. This made us curious if the way a person "feels" can be quantised by analysing the data that this person creates at this moment.

Feelings have their origin mainly in evolution to grant the ability to survive. Without the feeling "love" the mankind would already have died out [3]. Other scientists already found law-like patterns in human preference behaviour that are based on unconscious processes [1]. We were curious if we were able to reproduce the results.

We were able to reproduce the previous results and found law-like patterns ourselves. Especially the absolute correctness that we found as well was impressive. We found until now no evidence that indicated flaws. We found the same patterns for different cultures.

2 Defining the data source and the shape of the pattern

Bit strings are not suited to examine them for preferences, because they consists of only two digits. We didn't had the resources to sustain large experiments with a lot participants like [1]. So we decided to choose a free accessible data set for our studies. While a single author mostly don't write a lot (>100) books, we chose three different television series that have been produced in sufficient amount to undergo some intraclass correlation tests. The first one was "Star Trek: The Next Generation", which will be examined here in detail, with a main cast of 11 persons. This series can be watched free and legal through online streaming². Furthermore we examined the series "Mr. Bean", produced in England, and the series "Vicky the Viking", produced in Japan, Austria and Germany. We were able to prove a pattern that can be found in all three series.

For "ST:TNG" the data basis contain seasons 1, 3, 4, 5 and 6. We skipped season 2 for the different main cast in this season. We skipped seven additionally episodes because they are continuations of former episodes. In total there are 123 episodes.

Before creating a pattern, the basic outline must be defined. According to [1] every time a person is avoided, every time a person gets a positive benefit and every time a person just appears will be observed. This are equal outlines to the study that found patterns in preferences regarding approaching or avoiding objects.

² http://www.startrek.com/videos/star-trek-the-next-generation

An exemplary pattern could look like this:

	E1	E2	E3	E4
Jean-Luc Picard	*	*	-	*
William Riker	*			
Geordi La Forge	*	*		*
Worf		*	*,+	

Table 1: An exemplary pattern.

To describe over time which persons get a positive benefit or get a disadvantage (are avoided) the pattern will be divided into different events that allows an appearance and a person to be affected positively or negatively. Every "*" allows an appearance and every "+" or "-" allows a person to be affected positively or negatively. If a person appears who does not appear at the current event, but can appear at the next event the pattern moves on and other persons can be affected positively or negatively. An example: If E1 is the current event, then "Jean-Luc Picard" and "William Riker" (ST:TNG) can appear together and discuss. If "Worf" appears the next event is triggered. The event after E2 can only be triggered if "Worf" is affected positively or "Jean-Luc Picard" is affected negatively and so on.

A person counts as appeared if this person is clearly visible, is named or if the person starts to speak. If a person gets interrupted while speaking through someone else and then starts to speak again it counts as an other appearance. Equally if a person walks away and becomes visible again after this disappearance. This way a person that starts talking can appear and can talk about sickness and is affected through this negatively without appearing at the same time³. Only the first appearance after a disappearance does count. Otherwise a person that started speaking once or appeared once would never appear again and no consistent pattern could be created.

In this situation⁴:

Data: "Captain!"

first Data appears because he started to speak. Then Picard appears because he is named. If Data wasn't already visible but is visible shortly after he asked for the Captain, Data appears again.

³ Example: 1x09 E9

^{4 3}x03 E11

The following short forms will be used:

Jean-Luc Picard = P.Pi
William Riker = P.Ri
Geordi La Forge = P.LF
Worf = P.Wo
Deanna Troi = P.Tr
Data = P.Da
Beverly Crusher = P.BeC
Wesley Crusher = P.WeC
Tasha Yar = P.Ya

If "Jean-Luc Picard" appears, *P.Pi will be used. If "Jean-Luc Picard" is affected positively or negatively P.Pi+ or P.Pi- will be used.

If there are not enough appearances allowed the pattern would not fit if many persons appear at the exact same time in an episode. If too many persons are allowed to appear at the same event, the pattern would stuck and would not move on.

3 Results

The following describes the pattern how we found it in ST:TNG, which did also fit for the two other series "Mr. Bean" and "Vicky the Viking".

3.1 The pattern itself

It was possible to find a pattern that fits with all 123 episodes. For a complete description there are three other persons necessary:

P.A1	green, big/wide/a lot, lack of knowledge, do nothing, holiday, very old, starships, standby, science, stone, death, 4									
P.BW	lie, human/humanoid, neutral, colour black/white, silver, ice, cold, invisible, 12, 6									
P.En	energy, lovely									

Table 2: Persons that are not part of the ST:TNG main cast.

P.Al is needed to describe situations in that a lot of something appears like a lot persons. Every time there are more than five persons visible at the same time this counts as appearance of P.Al instead an appearance of every person on its own⁵. Every mentioned 4 or anything with the colour green counts as appearance of P.Al. Every Starfleet ship that appears counts as appearance of P.Al. If one of this ships gets in trouble this counts as P.Al-. The green aliens or the very old man that appear in 1x07

⁵ Examples: 1x04: E3, 3x25: E9

and 1x16 count both as P.Al, too.

The person P.BW appears wherever a 6 or 12 is mentioned or the colour black/white or silver appears. The Romulans in ST:TNG count as P.BW.

P.En appears wherever the word energy or the word lovely is mentioned. As person P.En appears often as young women. The warp core as source of all energy counts as an appearance of P.En too if it is shown or mentioned.

P.Ya additionally appears through the colour yellow, the number three or mentioning the earth.

Mostly all unfriendly aliens are the same person as P.Wo, like Cardassians or Klingons.

Additionally marks that was looked for:

Short form	Additionally observation
M1	open door, key, colour black/red, French, "not this"
M2	weapon, kisses, "What's that?", time travel
M3	humour
M4	fire
M5	water
M6	theft, children, try to get information (example: sensors), direct contact with unfriendly people, dance
M7	drink
M10	past
M11	unbelievable attainment
M12	temporary interruption
M13	long time
M14	short time, in a hurry, smoke, gas

Table 3: Additionally marks that was looked for.

The criterions that are named after each other appeared at the same places, like for M14 short times and smoke.

Locked doors seem to be also part of the pattern like for 3x09, 3x16, 6x19 and 6x22. Similar with stop drinking for 3x06 and 3x21.

The full pattern found for the 123 episodes looks like this:

		ь.	Г.	- -	 D.5		D7	ь.	_{E0}	F10	D 11	Б12	Б12	D1.4	
	E1	E2	E3	E4	E5	E6	E7	E8	E9				E13		_
P.Pi	*	*	*, -		*,+	-	*,+	*, -	*,+	*	-	*	-	*,+	*, -
P.Ri		*	*		*	-	*	*, -	*		*,+		*,+	*, -	*,+
P.LF	*	*			*, +		*, +	*, -	*	*,+	*	-	*	*	*,+
P.Wo	*		*	*	*, -	*	*, -	*, +	-	*, +	*, -		*, -	*, +	-
P.Tr	*, +		*	*		*	*	*, +	*, -		-	*	-	*	*, -
P.Da ⁶	*		*		*		*	*	-	*	*,+	-	*,+	*, -	*,+
P.BeC		*			*		*		*			*		*, -	*
P.WeC	*, -	*			*		*	-	*		*, -		*, -	*,+	*, -
P.Ya		*	*		*		*		*			*		*, -	*,+
P.Al	*, -		*	*, -		*	*	-	*, +			*, -		*, -	*,+
P.BW	*, +	-	*		*, -		*, -	*, +	-		-	*	-	*,+	*, -
P.En		*	*		*		*	-	*		-	*	-		*
P.Gu ⁷		*			*		*		*		*		*	*	
P.Ko ⁸	*		*						-	*	*, -		*, -	*	-
P.WSA ⁹	*		*		*		*			*	*		*	*	
M1	*		*			*		*	*		*		*	*	
M2					*		*		*			*		*	*
$M3^{10}$			*											*	
M4		*		*	*		*	*	*			*			*
M5	*	*	*		*		*	*			*	*	*	*	
M6	*		*	*		*		*			*		*	*	
M7	*				*		*		*		*		*	*	
M10				*								*			
M11									*						
M12												*			*
M13 ¹⁰														*	
M14															*

Table 4: The pattern for the beginning of 123 ST:TNG episodes.

⁶ Can also appear as child, examples: 1x17, 1x19

⁷ Guinan, appears in: 3x15, 3x21, 4x14, 5x07, 5x11 and 6x22

⁸ Kosinski or Barclay, appears in: 1x06, 3x21 and 4x19

⁹ Woman without special abilities, appears in: 1x03, 3x06, 3x22, 3x25 and 5x06

¹⁰ Not necessary

The events 10 and 11 don't have to appear. E4-E8 can be absent together. How the events have to appear after each other therefore looks like this:

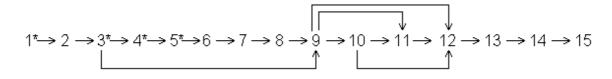


Figure 1: Row of events.

At the events 1, 3, 4 and 5 the pattern is allowed to start.

3.2 Proving the pattern

Appendix A and B show the pattern fitting with all 123 episodes. The probability that this pattern is caused through chance can be calculated as follows:

Originally this pattern was only designed to work with the 76 episodes from season 1, 3 and 4. After we designed this pattern we tested it with the fifth season and it fit with nearly no other changes. Before a small adjustment to fit with all 24 episodes again, the pattern did fit for season 5 for 23 episodes and did not fit for 1 episode. Therefore the probability that this pattern is caused through chance is $p = 24*(x^24)$ with x as probability, how often the pattern does fit with a single episode through chance.

We were able to determine that this pattern is more extensive than we have introduced it in the previous section. There are at least three more events we know about that probably will fit for all episodes. We haven't added this yet, but we assume the pattern found until now is only a small part of a larger pattern. Therefore searching at a later time for the pattern is equal to a test on random data. We assumed for the first season every episode would start after the opening credits. This time the pattern fit only every second time (Appendix C). Therefore the probability for this pattern to be caused through chance is x = 0.5. The probability that a pattern for 23 episodes out of 24 episodes were caused through chance is therefore $p = 24*(0.5^24) = 1.4*(10^6-6)$. This is equal to a one in a million chance (1:1,000,000). This shows that the existence of the found pattern is a million times likelier than its non-existence.

The intraclass correlation test will be done according to [4]. Every episode will be rated by all 15 parts of the pattern (table 4). A zero rating is given if a part of the pattern doesn't fit and an one rating if it does fit. For the fifth season the pattern did fit 23 times and did not fit 1 time, where the last 3 parts of the pattern did not fit.

Therefore every episodes true score (b_j) and all particular ratings (ab_{ij}) for i=1,2,..., k with k=15 and for j=1,2,..., n with n=24 are

$$b_j = \begin{cases} 1 & \text{if } j < 24 \\ 0 & \text{if } j = 24 \end{cases}$$

$$ab_{ij} = \begin{cases} 1 & \text{if } j < 24 \text{ or } i < 13 \\ 0 & \text{if } j = 24 \text{ and } i \ge 13 \end{cases}$$

The intraclass correlation coefficient for this case is:

$$ICC(3,k) = \frac{BMS - EMS}{BMS}$$

with

$$BMS = k\sigma_T^2 + \sigma_E^2$$
$$EMS = \frac{k}{k-1}\sigma_I^2 + \sigma_E^2$$

with $\sigma_E^2 = 0$ as variance for the random error because we use a not changing data source that allows us to rate it arbitrary often.

The other variances are

$$\bar{b} = \frac{1}{n} \sum_{j=1}^{n} b_{j}$$

$$\bar{ab} = \frac{1}{n \cdot k} \sum_{i=1}^{k} \sum_{j=1}^{n} ab_{ij}$$

$$\sigma_{T}^{2} = \frac{1}{n} \sum_{j=1}^{n} (b_{j} - \bar{b})^{2}$$

$$\sigma_{I}^{2} = \frac{1}{n \cdot k} \sum_{i=1}^{k} \sum_{j=1}^{n} (ab_{ij} - \bar{ab})^{2}$$

leading to

$$ICC(3,k) = \frac{BMS - EMS}{BMS} = \frac{k\sigma_T^2 - \frac{k}{k-1}\sigma_I^2}{k\sigma_T^2}$$
$$= \frac{15 \cdot 0.039 - \frac{15}{14} \cdot 0.008}{15 \cdot 0.039} = 0.985$$

which shows a high intraclass correlation ratio for the data source related to the found pattern.

We tested the pattern again for season 6. For season 6 two changes were applied to still fit with all episodes. Both additions didn't made the pattern fit less good with all other episodes. Before the two additions the pattern did fit for 20 episodes and did not fit for 3 episode. Because we used the same pattern we can merge season 5 and 6 and have therefore for the originally pattern 43 episodes that did fit and 4 episodes that did

not fit. The probability therefore is

$$p = \binom{47}{4} \cdot 0.5^{47} = 1.3 \cdot 10^{-9}.$$

This is even above 5 sigma that is used in particle physics for the declaration of a discovery [5]. This probability is equal to a 99.9999987% certainty about the pattern.

Additionally we want to add a more detailed comparison between season 6 and the random data out of season 1. Both results are displayed more graphically in Appendix B. For table 6 (season 6) the pattern did fit with all episodes after two adjustments for the pattern. For table 7 (random data out of season 1) the pattern did fit every second time. For table 6 the pattern started with "E3→E9" 9 times, with "E5→E6→E7→E8→E9" 9 times and with "E3→E4→E5→E6→E7→E8→E9" 5 times. For table 7 the pattern started for the given cases 9 times, 3 times and 0 times for the 12 fitting episodes. While for table 6 long patterns and short patterns appearing similar after each other, for table 7 short patterns are favoured. This indicates that table 7 (random data out of season 1) doesn't actually contain a pattern, because short patterns that fit easier are mainly found. For table 6 (season 6) long patterns are not disadvantaged, indicating a higher probability for an actually existing pattern than for the other test.

3.3 Origin

There are no cultural differences. We examined further series and found the same pattern. The series "Mr. Bean", produced in England, does fit for all 14 episodes with "Mr. Bean" as P.WeC and "The other person" as P.Ya. The series "Vicky the Viking", produced in Japan, Austria and Germany, does also fit for the first season, with "Vicky" = P.Da, "Halvar" = P.Wo, "Tjure" = P.BW, "Snorre" = P.Pi, "Urobe" = P.Al, "Faxe" = P.Wo, "Gorm" = P.Ko, "Ulme" = P.Ya, "Ylva" = P.BW and "Ylvie" = P.Tr. To fit with all 26 episodes only for M5 (Water) changes were applied. The previous pattern for M5, based on ST:TNG, was anyway mainly guessed, since there is not much water in ST:TNG.

It is unlikely that ST:TNG was produced with the intention to let people always appear and be affected in a similar way. Even if a few writers had decided to consciously write all episodes in a similar way, this series heavily relied on fan scripts [6], who were certainly not informed about any secret guideline. To create this pattern consciously for all three series all writers must had worked together and not after each other, like for ST:TNG and "Mr. Bean" around 1990 and "Vicky the Viking" around 1975.

While the pattern itself was always the same, the way the pattern started changed. The following table shows where and how often the pattern started for every season:

	Season 1	Season 3	Season 4	Season 5	Season 6
E1	2	5	3	2	0
E3	13	11	11	17	14
E4/E5	9	10	11	5	9

Table 5: Where and how often the pattern started for every season.

While season 1, 3 and 4 behaved similar to each other, season 5 and 6 are different. An explanation could be, that executive producer Gene Roddenberry died during season 5. He believed that personal conflict would not longer exist in future and this seemed to be beyond the reach of most writers. After his death this writers joined the staff again and finally for season 6 internal conflict among the crew became a common plot ingredient again [7]. This could explain the different behaviour for season 5 and 6. This example shows, plots that are written with different intentions are able to change where the pattern starts, but the pattern itself stayed the same.

Because different conscious intentions for plots, different times (1975/1990) and different cultures (Austria, England, Germany, Japan, USA) don't change the pattern we assume an unconscious origin. It is not known from any writer of series plots to have once included intentionally a complex pattern like we found one (table 4). The unconscious is more suited for this task: "Previous studies have led to the claim that our unconscious is in fact sensitive to patterns in stimuli much more complex than what we could ever recognize consciously" [8]. Because this underlying pattern was found in every series we looked for it, the actually origin for this collective unconscious behaviour seems to be a genetically origin. This can explain the equal patterns for different cultures easily like all human lungs function equal to each other. Genes are able to influence human behaviour directly: "Studies over the last 15 years have indicated that genomic imprinting is important for brain function. However, much of the focus has been on the role that imprinted genes play in mediating fetal and early

postnatal growth, and maternal behaviour. Nevertheless, there is now a growing body of evidence to suggest that many imprinted genes are expressed in many different areas of the adult brain. Moreover, these genes also influence a wide range of behaviour and aspects of cognition." [9]. We know that complex behaviour can be produced completely out of genetic factors like the stoats hunting behaviour [10] or human babies that are able to swim by birth. We assume that this pattern can be found for every series with a similar set for the appearing persons, in a way that it fit for every episode.

This results are challenging for the theory of evolution. Genetic information change slowly: "At the conventional sequence divergence rate of 2% per million years, roughly 1 of 500 base pairs is expected to change after 100,000 years of maternal lineage separation" [11]. The pattern contains a lot native elements like fire, water, colours or numbers. But there are other elements like open doors, keys, science and starships that were unknown until a few thousand years ago and should be not included therefore. This is similar to an other major problem about the theory of evolution, creating a suitable theory for the origin of first life. There is a force missing that drives polymerization. Random associations therefore would take an incredible amount of time without enzymathic help. The question of how simple organic molecules formed a protocell is largely unanswered [12]. If we assume an mechanisms that creates information in a way they are needed later, evolution could explain both results. Until this mechanism is found both problems remain unsolved. Suprisingly non-mainstream theories like Intelligent Design seem to provide a solution by assuming a designer who guided information in a way they are needed later. Combined with the new found pattern with the same problems like the origin of life this goes beyond the "God of the gaps" argument.

3.4 Intelligent Design

Until now we assumed the collective unconscious behaviour we found was caused through genetical factors that caused similar approach and avoidance behaviour that changed every time an action related to approaching or avoiding objects were realised. For [1] was found that humans are unconsciously determined to approach food when they are hungry and avoid food when satiated. This resulted in a genetical determined behaviour over time for approaching and avoiding food alternately. We found similar alternating patterns.

As we looked for more information how ST:TNG was produced we found that movies and series are almost never filmed in chronological order [13]. We assumed the equal pattern we found in 123 ST:TNG episodes and two other series was caused through repeating genetical determined behaviour for the script like found in [1]. Through not filming in chronological order genetical determined patterns would be randomly applied and this wouldn't result in recognisable patterns.

The previous section already excluded conscious behaviour as cause for the found pattern. Now genetically created unconscious behaviour is excluded too. This results in the finding that no person related to ST:TNG in this time can be responsible for the found pattern, neither consciously nor unconsciously. There is no possibility that this pattern was created out of chance, we already calculated this probability to 1: 10° (3.2). There is no possibility that this pattern was created through a long time of natural selection like for evolution, we already excluded the genetical possibility. As there is no human or natural selection or chance that created this pattern this pattern must be created by something else. There are different possibilities like an ubiquitous "field" that generates this pattern or information. This proves Intelligent Design because there is no natural selection that can explain the created patterns.

4 Appendix A

Appendix A lists detailed all appearances and persons that are affected by situations and the movement through the pattern for season 1, 3, 4 and 5. Appendix C lists the attempt to apply this pattern at a later starting point. The notation looks like this:

1x01 Encounter At Farpoint (1)

<u>E3: (OC) 02:32</u> {*P.Al, *P.Pi, *P.Al, M1, *P.En, *P.Pi, M1, *P.Pi, P.Pi-, *P.Wo}/<u>E9: 03:06</u> {M11, P.Al+, *P.Ya, *P.Tr}/<u>E11: 03:09</u> {*P.Da}/<u>E12: 03:10</u> {*P.Al}/<u>E13: 03:13</u> {*P.Ri}/<u>E14: 03:15</u> {*P.Pi, M1}/<u>E15: 03:16</u> {P.Ri+, *P.Tr, *P.Ya}

The caption contains the episode number and the title. The text contains the event numbers, the time the events occur and all appearances. The first three episodes contain more detailed descriptions. For season 3, 4 and 5 there are only appearances and affected persons noted that triggers the next event. Starships at the beginning are also skipped then. "(OC)" tells the opening credits are included.

1x01 Encounter At Farpoint (1)

E3: (OC) 02:32 {*P.Al, *P.Pi, *P.Al, M1, *P.En, *P.Pi, M1, *P.Pi, P.Pi-, *P.Wo}/<u>E9:</u> 03:06 {M11, P.Al+, *P.Ya, *P.Tr}/<u>E11: 03:09</u> {*P.Da}/<u>E12: 03:10</u> {*P.Al¹¹}/<u>E13: 03:13</u> {*P.Ri}/<u>E14: 03:15</u> {*P.Pi, M1}/<u>E15: 03:16</u> {P.Ri+, *P.Tr, *P.Ya}

1x02 Encounter At Farpoint (2)

Continuation of 1x01

1x03 The Naked Now

<u>E4: 00:04</u> {*P.Al}/<u>E5: 00:06</u> {*P.Pi}/<u>E6: 00:13</u> {*P.Al¹², M6}/<u>E7: 00:23</u> {*P.Da}/<u>E8: 00:27</u> {P.Al-¹³, *P.Tr,*P.LF}/<u>E9: 00:28</u> {*P.Ya,*P.Pi,*P.Al¹⁴}/<u>E11: 00:34</u> {*P.Da¹⁵}/<u>E12: 00:34</u> {*P.Al¹²}/E13: 00:38 {*P.WSA¹⁶, *P.Ri¹⁷}/E14: 00:47 {*P.Tr}/E15: 00:48 {P.Tr-}

1x04 Code Of Honor

 $\frac{\text{E3: }00:06}{\text{{*P.A1, *P.Pi, *P.A1$}}} \frac{\text{E9: }00:29}{\text{{*P.LF$}}^{19}, \text{{*P.Ri, *P.Ya, *P.Pi}}} \frac{\text{E11: }00:34}{\text{{*P.Wo}}} \frac{\text{{E12: }}00:36}{\text{{*P.Pi, *P.A1$}}^{18}} \frac{\text{{E13: }}00:39}{\text{{*P.Da$}}^{20}, \text{{P.Da$}}^{20}, \text{{M1}}} \frac{\text{{E11: }}00:45}{\text{{*P.Pi, *P.Ri, *P.Tr$}}^{21}, \text{{P.Pi+}}} \frac{\text{{E15: }}00:50}{\text{{P.Ri+}}}$

^{11 (1}x01 E12) The crew is mentioned, the crew in ST:TNG consist of 1000 persons

^{12 (1}x03 E6, E12) A starfleet science vessel is mentioned

^{13 (1}x03 E8) Problems on the starfleet science vessel are mentioned

^{14 (1}x03 E9) Number of persons visible at the same time exceeds 5

^{15 (1}x03 E11) Data starts to speak

^{16 (1}x03 E13) Woman without special abilities, appears in: 1x03, 3x06, 3x22, 3x25 and 5x06

^{17 (1}x03 E13) Riker appears again through disappearance before, Picard was visible since E7 without interruption, he does not appear again

^{18 (1}x04 E3, E12) Number of persons visible at the same time exceeds 5

^{19 (1}x04 E9) Data was recognisable since E3 without interruption, he does not appear again, La Forge appears again through disappearance before and starting to speak

^{20 (1}x04 E13) Data is named and has the helm

^{21 (1}x04 E14) Picard, Riker and Troi appear again through disappearance shortly before

1x05 The Last Outpost

E4: 00:02 {*P.A1}/E5: 00:03 {*P.Pi, *P.Wo}/E6: 00:15 {M6, *P.A1, M6}/E7: 00:21 {*P.Pi, *P.Wo, *P.Ri, P.Pi+}/E8: 00:24 {M6}/E9: 00:26 {*P.Ya, *P.Pi, *P.A1, *P.Ri, *P.Pi}/E11: 00:43 {*P.Wo}/E12: 00:46 {*P.Pi}/E13: 00:49 {*P.Da, *P.LF}/E14: 00:52 {*P.Pi, *P.Da, *P.A1, *P.Ri, *P.LF, *P.Wo, *P.Ya, M6}/E15: 01:06 {*P.En}

1x06 Where No One Has Gone Before

<u>E4: 00:01</u> {*P.A1}/<u>E5: 00:03</u> {*P.Pi}/<u>E6: 00:09</u> {*P.A1, M6}/<u>E7: 00:19</u> {*P.LF, *P.Pi}/<u>E8: 00:23</u> {P.Ri-, *P.Ri}/<u>E9: 00:26</u> {P.Ko-, *P.Ri}/<u>E11: 00:35</u> {*P.Ko, P.Ko-}/<u>E12: 00:39</u> {*P.Pi}/<u>E13: 00:40</u> {*P.Ri, *P.Da}/<u>E14: 00:41</u> {*P.A1, *P.Da, *P.Ko}/<u>E15: 00:47</u> {P.Ko-, *P.Pi, *P.A1, P.A1+}

1x07 Lonely Among Us

<u>E4: 00:01</u> {*P.Al}/<u>E5: 00:02</u> {*P.Pi}/<u>E6: 00:03</u> {*P.Al, M6}/<u>E7: 00:14</u> {*P.Ya, *P.Ri, *P.Pi, *P.Wo, *P.Al, *P.BW, *P.Ya, *P.Ri, *P.Pi, *P.Al, *P.Ya, *P.Pi, *P.Al, *P.Pi, *P.Al}/<u>E8: 00:51</u> {P.Al-, *P.Wo, P.Wo+}/<u>E9: 00:54</u> {*P.Ya, *P.Ri, *P.Ya}/<u>E10: 00:56</u> {*P.Wo, P.Wo+}/<u>E12: 00:58</u> {*P.BW, *P.Al}/<u>E13: 01:00</u> {*P.Wo, M6}/<u>E14: 01:02</u> {*P.Pi, *P.Ya, *P.Ri, *P.Pi, *P.Al, P.Al-, *P.Ya, *P.Pi, *P.Ri}/<u>E15: 01:10</u> {P.Al+}

1x08 Justice

<u>E3: 00:03</u> {*P.Al, *P.Pi, *P.Ya, *P.Pi, *P.En, *P.Ri, *P.Al, *P.Ri}/<u>E9: 00:29</u> {*P.BeC, M1, *P.Tr}/<u>E11: 00:31</u> {P.Ri+}/<u>E12: 00:32</u> {*P.BeC, *P.Pi}/<u>E13: 00:34</u> {P.Tr-}/<u>E14: 00:35</u> {*P.Tr, *P.BeC, *P.Pi, *P.Tr, *P.Al, *P.BeC, P.Al-, *P.WeC, *P.Al, P.BeC-, *P.Ri, *P.Da}/E15: 00:55 {P.Ri+}

1x09 The Battle

E3: 00:04 {*P.Wo, *P.Pi, *P.Al, M5, *P.Wo, *P.Pi, *P.Wo, *P.Ya, *P.Al, M1}/E9: 00:28 {*P.BeC, *P.Pi}/E11: 00:47 {P.Pi-}/E12: 00:56 {*P.BeC, *P.Pi}/E13: 00:57 {P.Pi-}/E14: 01:00 {*P.BeC, M6, *P.Pi, *P.Wo, *P.Al, *P.BeC, *P.Pi, M6}/E15: 01:29 {P.Pi-, *P.BeC}

1x10 Hide And Q

<u>E1: 00:02</u> {*P.Al, *P.Pi, *P.Tr, *P.BW, P.Tr+}/<u>E2: 00:13</u> {*P.Ya}/<u>E3: 00:19</u> {*P.Al, M1}/<u>E9: 00:21</u> {*P.BeC, M4}/<u>E12: 00:27</u> {*P.BW, *P.Pi, *P.BeC, *P.Ya, *P.Pi, *P.Al, *P.BeC}/<u>E13: 00:40</u> {*P.LF}/<u>E14: 00:41</u> {*P.Pi, *P.LF, *P.Da, M13,*P.Ya, *P.Pi, M1, *P.Ri}/<u>E15: 00:52</u> {M14}

1x11 Haven

1x12 The Big Goodbye

<u>E4: 00:01</u> {*P.A1}/<u>E5: 00:03</u> {*P.Ri, *P.LF, *P.Da}/<u>E6: 00:10</u> {M6, *P.Wo}/<u>E7: 00:11</u> {*P.Ri, *P.A1, *P.Pi}/<u>E8: 00:26</u> {P.Ri-, *P.Pi, *P.Tr, P.Tr+, *P.Pi, *P.Tr, *P.Pi}/<u>E9: 00:45</u> {*P.Ya, *P.Tr, *P.Pi}/<u>E11: 00:49</u> {P.Pi-}/<u>E12: 00:50</u> {*P.Tr, *P.Pi}/<u>E13: 00:53</u> {P.Pi-}/<u>E14: 00:57</u> {*P.Tr, *P.Wo, *P.Pi}/<u>E15: 01:00</u> {P.Pi-}

1x13 Datalore

E3: 00:03 {*P.Al, *P.Pi, *P.Da, *P.Ya, *P.Ri, *P.Al, M1}/E9: 00:25 {*P.LF, *P.WeC, *P.Ri, *P.Pi, *P.Ya, *P.Ri}/E11: 00:33 {*P.Da}/E12: 00:34 {P.Da-, *P.Pi}/E13: 00:39 {P.Da+, *P.Da, M1, *P.WeC}/E14: 00:50 {P.Da-, *P.WeC, *P.Da, *P.WeC, *P.BW, *P.Da, *P.BW, *P.WeC, *P.Da, *P.WeC, *P.Da}/E15: 01:19 {P.Da+}

1x14 Angel One

<u>E1: 00:05</u> {*P.Al, *P.Pi, *P.Al, P.Al-}/<u>E2: 00:18</u> {*P.Ya, *P.Pi}/<u>E3: 00:20</u> {*P.Al}/<u>E9: 00:22</u> {*P.LF, *P.Pi, *P.LF}/<u>E11: 00:27</u> {*P.Da}/<u>E12: 00:31</u> {*P.Al, M10}/<u>E13: 00:38</u> {*P.LF}/<u>E14: 00:39</u> {*P.Tr, *P.Ya, *P.Ri, *P.Wo, *P.Al}/<u>E15: 00:48</u> {M14}

1x15 11001001

E3: 00:03 {*P.Al, *P.Pi, *P.Al, *P.Ya, *P.Al, M1}/E9: 00:32 {Al+, M11, *P.Pi, *P.Al, M1, *P.Al, *P.LF, *P.Ri}/E11: 00:52 {*P.Da}/E12: 00:56 {*P.Pi, *P.Al}/E13: 01:01 {*P.LF, *P.Ri, *P.Da, *P.LF, *P.Ri}/E14: 01:14 {*P.Pi, *P.Ri}/E15: 01:17 {P.Ri+, P.Al+}

1x16 Too Short A Season

<u>E3: 00:01</u> {*P.Al, *P.Pi, *P.Al, *P.Pi, *P.Al, *P.Pi, *P.Da}/<u>E9: 00:26</u> {*P.WeC, *P.Al}/<u>E11: 00:33</u> {M6, P.WeC-}/<u>E12: 00:38</u> {*P.Pi}/<u>E13: 00:41</u> {P.WeC-, *P.Da, *P.WeC}/<u>E14: 00:59</u> {*P.Al, *P.BW, *P.Al, *P.Pi, *P.Al, M13, *P.Al, *P.Pi, *P.WeC, P.WeC+}/E15: 01:27 {P.WeC-}

1x17 When The Bough Breaks

E3: 00:01 {M1, *P.Ri, *P.Pi, *P.Da}/E9: 00:11 {P.Da-, *P.Ri}/E11: 00:16 {*P.Da, *P.Ri}/E12: 00:20 {*P.Al}/E13: 00:20 {*P.Da, *P.Ri, *P.Da}/E14: 00:30 {P.Da-, *P.Al, *P.Da, M1, *P.LF, *P.Da, M1, *P.Ri, *P.Ya, *P.BeC, P.Ri-, *P.Tr, *P.Pi, *P.Wo}/E15: 00:56 {P.Da+, M14}

1x18 Home Soil

E3: 00:02 {*P.Al, *P.Pi, M6, *P.Ya}/E9: 00:16 {*P.LF, *P.Al, *P.Pi}/E11: 00:21 {*P.Da}/E12: 00:22 {*P.Tr}/E13: 00:25 {*P.Ri}/E14: 00:27 {*P.Pi, *P.Ya, *P.Wo, *P.Tr, *P.Ri, *P.Da, *P.Pi, *P.Ya, *P.Tr, *P.Ri}/E15: 00:41 {M12}

1x19 Coming of Age

E3: 00:02 {*P.Al, *P.Da, *P.Al}/<u>E9</u>: 00:10 {*P.WeC}/<u>E11</u>: 00:11 {*P.Da}/<u>E12</u>: 00:14 {*P.Al}/<u>E13</u>: 00:15 {*P.Da, *P.WeC}/<u>E14</u>: 00:28 {P.Da-, *P.BeC, *P.WeC, *P.Da, *P.WeC, *P.Da, *P.WeC, *P.Da, *P.WeC, *P.Pi, *P.BeC, *P.Ya, *P.Ri, *P.WeC, *P.Wo}/<u>E15</u>: 01:23 {M14}

1x20 Heart Of Glory

<u>E4: 00:03</u> {*P.Al, *P.Wo}/<u>E5: 00:08</u> {*P.Pi, *P.BW, *P.Pi, *P.Wo, M2}/<u>E6: 00:19</u> {*P.Al}/<u>E7: 00:20</u> {*P.Ri, *P.Pi, *P.Ya, *P.Pi, *P.LF, *P.Da, *P.LF, *P.Da}/<u>E8: 00:27</u> {P.Al-, *P.Pi, *P.Ri, *P.Wo, *P.Pi}/<u>E9: 00:31</u> {P.Wo-, *P.Ri, *P.Pi}/<u>E11: 00:33</u> {M6}/<u>E12: 00:35</u> {*P.Al}/<u>E13: 00:36</u> {*P.LF}/<u>E14: 00:37</u> {*P.Pi, *P.LF, *P.Al, *P.LF, *P.BW, *P.Ya, M6, M2, *P.Ri, *P.Pi, *P.Da}/<u>E15: 01:00</u> {P.Wo-, *P.BW, *P.Pi, *P.Ri, P.BW-}

1x21 The Arsenal Of Freedom

<u>E1: 00:02</u> {*P.Al, *P.Pi, *P.Al, P.Al-, M6, M1, *P.Pi}/<u>E2: 00:29</u> {*P.Ri}/<u>E3: 00:31</u> {*P.Tr, *P.Al, *P.Pi, *P.Da, *P.Al}/<u>E9: 00:40</u> {M2, *P.LF}/<u>E11: 00:46</u> {*P.Da}/<u>E12: 00:47</u> {P.Al-, *P.Pi}/<u>E13: 00:49</u> {*P.LF}/<u>E14: 00:50</u> {*P.Al, *P.Pi, *P.LF, *P.Ri, *P.Al}/<u>E15: 00:58</u> {M14}

1x22 Symbiosis

<u>E4: 00:01</u> {*P.A1}/<u>E5: 00:08</u> {*P.Pi}/<u>E6: 00:08</u> {*P.A1}/<u>E7: 00:09</u> {*P.Pi, *P.En}/<u>E8: 00:16</u> {M1, *P.Tr, *P.Pi}/<u>E9: 00:25</u> {*P.BeC, *P.WeC, *P.Pi}/<u>E12: 00:36</u> {M12, *P.Ya}/E13: 00:39 {*P.Wo}/E14: 00:41 {*P.Ya, *P.A1}/E15: 00:48 {*P.En}

1x23 Skin Of Evil

<u>E3: 00:03</u> {*P.Al, *P.Pi, *P.Tr, M1, *P.Da, *P.Pi, *P.Ya, *P.Wo, M6, *P.Ya, *P.Wo, *P.Ya}/<u>E9: 00:37</u> {P.Wo-}/<u>E11: 00:40</u> {*P.Wo}/<u>E12: 00:45</u> {*P.Ya, *P.Al}/<u>E13: 00:48</u> {*P.Wo}/<u>E14: 00:50</u> {P.Al-, *P.Ya, P.Ya-, *P.Wo}/<u>E15: 00:55</u> {P.Ya+}

1x24 We'll Always Have Paris

<u>E4: 00:01</u> {*P.A1}/<u>E5: 00:03</u> {*P.Pi}/<u>E6: 00:10</u> {*P.A1}/<u>E7: 00:13</u> {*P.BW, P.Pi+}/<u>E8: 00:23</u> {P.Pi-}/<u>E9: 00:25</u> {*P.Ya, *P.Pi}/<u>E12: 00:29</u> {*P.BW, *P.Ya}/<u>E13: 00:30</u> {P.Pi-}/<u>E14: 00:30</u> {*P.Pi}/<u>E15: 00:32</u> {P.Ya+}

1x25 Conspiracy

E3: 00:03 {*P.Al, *P.Ri, M5, *P.Al, *P.Wo, *P.Tr, *P.Ri, M1}/E9: 00:18 {*P.LF}/E11 00:19 {*P.Da, *P.Wo, P.Wo-}/E12: 00:21 {*P.En}/E13: 00:26 {P.Wo-}/E14: 00:28 {M3, *P.Da, *P.LF, *P.Da, *P.LF, *P.Da, P.Da-, *P.Tr, *P.Ri, *P.LF, *P.Da, *P.LF, *P.Tr, *P.Ri}/E15: 01:12 {M14}

1x26 The Neutral Zone

E3: 00:01 {*P.Al, *P.Ri, *P.Al, *P.Pi, *P.Ri, *P.Al, M6, *P.Da, *P.Ya}/E9: 00:18 {*P.LF}/E11: 00:20 {*P.Da, *P.Ri, *P.Wo}/E12: 00:24 {P.Al-}/E13: 00:26 {*P.Wo, *P.Ri}/E14: 00:30 {P.Al-, *P.Pi, *P.Wo, *P.Ri, *P.Pi, *P.Da, *P.Wo, M13, *P.Da, *P.Ri, *P.Da, *P.Ri, M13, *P.Ri, *P.Pi, *P.Wo, *P.Da}/E15: 01:01 {P.Da+}

3x01 Evolution

E1: 00:12 {*P.Al}/E2: 00:31 {*P.Ri}/E3: 00:37 {*P.Wo}/E9: 00:39 {*P.WeC}/E11: 00:42 {P.WeC-}/E12: 00:54 {*P.Pi}/E13: 00:59 {*P.Wo, *P.WeC}/E14: 01:05 {P.WeC+}/E15: 01:16 {M14}

3x02 The Ensigns Of Command

<u>E3: 00:07</u> {M1}/<u>E9: 00:20</u> {*P.BeC}/<u>E11: 00:27</u> {*P.Da}/<u>E12: 00:32</u> {P.Da-}/<u>E13: 00:36</u> {*P.Da}/<u>E14: 00:36</u> {*P.Pi}/<u>E15: 00:52</u> {P.Da+}

3x03 The Survivors

E3: 00:03 {*P.Pi}/E4: 00:12 {P.Al-}/E5: 00:15 {*P.Pi}/E6: 00:19 {*P.Al}/E7: 00:27 {*P.Ri}/E8: 00:31 {M6}/E9: 00:40 {*P.WeC}/E11: 00:44 {*P.Da}/E12: 00:44 {*P.Pi}/E13: 00:45 {*P.Da, *P.WeC}/E14: 00:47 {P.Al-, *P.Pi}/E15: 01:00 {P.Tr-}

3x04 Who Watches The Watchers

<u>E3: 00:04</u> {*P.Pi}/<u>E9: 00:20</u> {*P.LF}/<u>E12: 00:25</u> {P.LF-}/<u>E13: 00:30</u> {*P.Ri}/<u>E14: 00:32</u> {M2}/<u>E15: 00:37</u> {P.LF+}

3x05 The Bonding

<u>E5: 00:11</u> {*P.Ri}/<u>E6: 00:14</u> {*P.Al}/<u>E7: 00:16</u> {*P.Pi}/<u>E8: 00:37</u> {P.Al-}/<u>E9: 00:53</u> {P.Tr-}/<u>E11: 00:55</u> {*P.Wo, P.Wo-}/<u>E12: 00:57</u> {*P.Tr}/<u>E13: 00:59</u> {*P.Ri}/<u>E14: 01:00</u> {*P.Pi}/<u>E15: (OC) 03:23</u> {P.Pi-}

3x06 Booby Trap

<u>E1: 00:02</u> {*P.A1, *P.LF, M5, M7}/<u>E2: 00:24</u> {-M7}/<u>E3: 00:30</u> {*P.WSA}/<u>E9: 00:33</u> {*P.LF}/<u>E11: 00:39</u> {*P.WSA}/<u>E12: 00:41</u> {M10, *P.Ya}/<u>E13: 00:46</u> {*P.WSA}/<u>E14: 00:50</u> {*P.Ya}/<u>E15: 01:14</u> {*P.En, P.LF+}

3x07 The Enemy

E4: 00:01 {*P.A1}/E5: 00:14 {*P.LF}/E6: 00:33 {*P.A1}/E7: 00:34 {*P.Ri}/E8: 00:34 {M6}/E9: 00:40 {P.Da-}/E11: 00:46 {M6}/E12: 01:10 {*P.BW}/E13: 01:12 {*P.Ri}/E14: 01:16 {*P.BW}/E15: 01:28 {P.BW-}

3x08 The Price

<u>E1: 00:02</u> {*P.Al, P.Tr+}/<u>E2: 00:17</u> {*P.Ya}/<u>E3: 00:18</u> {*P.Da}/<u>E9: 00:21</u> {P.Tr-}/<u>E11: 00:24</u> {*P.Da}/<u>E12: 00:34</u> {*P.BW}/<u>E13: 00:56</u> {P.Tr-}/<u>E14: 01:07</u> {*P.Pi}/<u>E15: 01:11</u> {P.Tr-}

3x09 The Vengeance Factor

E4: 00:01 {*P.Al}/E5: 00:23 {*P.Da}/E6: 00:26 {M6}/E7: 00:30 {*P.Ri}/E8: 00:31 {P.Al-}/E9: 00:35 {*P.BeC}/E11: 00:42 {*P.Wo}/E12: 00:43 {P.Al-}/E13: 00:46 {*P.Da}/E14: 00:51 {P.Al-, *P.Al}/E15: 01:18 {P.Wo-}

3x10 The Defector

<u>E4: 00:01</u> {M10}/<u>E5: 00:27</u> {*P.Da}/<u>E6: 00:43</u> {*P.A1}/<u>E7: 00:49</u> {*P.Da}/<u>E8: 01:24</u> {P.BW+}/<u>E9: 01:30</u> {P.Da-}/<u>E11: 01:32</u> {P.Da+}/<u>E12: 01:40</u> {*P.A1}/<u>E13: 01:43</u> {*P.Da}/<u>E14: 01:58</u> {*P.A1}/<u>E15: 02:08</u> {P.Da+}

3x11 The Hunted

<u>E3: 00:03</u> {*P.Pi}/<u>E9: 00:22</u> {M11}/<u>E11: 00:31</u> {P.WeC-}/<u>E12: 00:38</u> {*P.Pi}/<u>E13: 00:39</u> {P.Pi-}/<u>E14: 00:41</u> {P.WeC+, M13}/<u>E15: 00:53</u> {M12, P.WeC-}

3x12 The High Ground

<u>E5: 00:02</u> {*P.Pi}/<u>E6: 00:08</u> {*P.Al}/<u>E7: 00:14</u> {*P.Da}/<u>E8: 00:22</u> {P.Wo+, P.Al-}/<u>E9: 00:31</u> {*P.BeC}/<u>E11: 00:31</u> {*P.Wo}/<u>E12: 00:37</u> {*P.BeC}/<u>E13: 00:43</u> {*P.Da}/<u>E14: 00:43</u> {*P.BeC}/<u>E15: 00:45</u> {M14}

3x13 Deja Q

<u>E4: 00:01</u> {*P.A1}/<u>E5: 00:04</u> {*P.Pi}/<u>E6: 00:08</u> {*P.A1]/<u>E7: 00:13</u> {*P.Pi}/<u>E8: 00:14</u> {P.A1-}/<u>E9: 00:27</u> {*P.A1}/<u>E12: 00:29</u> {P.A1-}/<u>E13: 00:34</u> {*P.Da}/<u>E14: 00:35</u> {*P.Pi}/<u>E15: 00:40</u> {P.A1+}

3x14 A Matter Of Perspective

<u>E1: 00:10</u> {*P.Pi}/<u>E2: 01:02</u> {*P.Ya}/<u>E3: 01:06</u> {*P.Da, P.Pi-}/<u>E9: 02:03</u> {P.Da-}/<u>E11: 02:07</u> {*P.Da}/<u>E12: 02:09</u> {P.Da-}/<u>E13: 02:33</u> {*P.LF}/<u>E14: 02:34</u> {*P.Pi}/<u>E15: 02:35</u> {*P.En}

3x15 Yesterday's Enterprise

<u>E3: 00:01</u> {*P.Wo}/<u>E9: 00:05</u> {M7}/<u>E11: 00:13</u> {*P.Wo}/<u>E12: 00:13</u> {M2}/<u>E13: 00:14</u> {*P.Gu}/<u>E14: 00:23</u> {*P.Ya, P.Wo+}/<u>E15: 00:36</u> {P.Wo-}

3x16 The Offspring

<u>E3: 00:03</u> {*P.Pi}/<u>E9: 00:13</u> {*P.LF}/<u>E11: 00:17</u> {*P.Da}/<u>E12: 00:18</u> {*P.Tr}/<u>E13: 00:19</u> {*P.Da, P.WeC-}/<u>E14: 00:28</u> {*P.Tr}/<u>E15: 00:34</u> {P.WeC-}

3x17 Sins Of The Father

<u>E3: 00:01</u> {*P.Pi}/<u>E9: 00:21</u> {P.Wo-}/<u>E10: 00:23</u> {P.Wo+}/<u>E11: 00:27</u> {P.Ri+}/<u>E12: 00:32</u> {*P.Al}/<u>E13: 00:35</u> {*P.Ri}/<u>E14: 00:40</u> {*P.Pi}/<u>E15: 00:47</u> {*P.En}

3x18 Allegianc

<u>E5: 00:03</u> {*P.Pi}/<u>E6: 00:19</u> {*P.A1}/<u>E7: 00:22</u> {*P.BW}/<u>E8: 00:40</u> {M6, P1.5-}/<u>E9: 00:50</u> {*P.En}/<u>E11: 00:59</u> {*P.Wo}/<u>E12: 01:03</u> {*P.Pi}/<u>E13: 01:29</u> {*P.Da}/<u>E14: 01:31</u> {*P.Pi}/E15: 01:43 {M12, P1.5-}

3x19 Captain's Holiday

<u>E3: 00:02</u> {*P.A1}/<u>E9: 00:22</u> {*P.WeC}/<u>E11: 00:48</u> {M6}/<u>E12: 00:51</u> {*P.Pi}/<u>E13: 01:04</u> {P.WeC-}/<u>E14: 01:09</u> {*P.Pi}/<u>E15: 01:37</u> {P.Tr-}

3x20 Tin Man

<u>E5: 00:03</u> {*P.Pi}/<u>E6: 00:10</u> {M6}/<u>E7: 00:18</u> {*P.Da}/<u>E8: 00:19</u> {M6}/<u>E9: 00:20</u> {*P.Al}/<u>E11: 00:25</u> {P.Pi-}/<u>E12: 00:29</u> {P.Al-}/<u>E13: 00:30</u> {*P.Wo}/<u>E14: 00:33</u> {*P.Pi}/<u>E15: 00:37</u> {P.Ri+}

3x21 Hollow Pursuits

<u>E1: 00:03</u> {P.Tr+}/<u>E2: 00:09</u> {*P.Gu}/<u>E3: 00:10</u> {M1}/<u>E9: 00:15</u> {*P.Gu}/<u>E11: 00:18</u> {*P.Ko}/<u>E12: 00:37</u> {P.LF-}/<u>E13: 00:39</u> {*P.Ri}/<u>E14: 00:41</u> {*P.Al}/<u>E15: 01:47</u> {M14, P.Tr-}

3x22 The Most Toys

<u>E3: 00:02</u> {*P.Pi}/<u>E9: 01:08</u> {P.Da-}/<u>E11: 01:10</u> {*P.WSA}/<u>E12: 01:13</u> {P.Da-}/<u>E13: 01:17</u> {M6}/<u>E14: 01:32</u> {*P.Al}/<u>E15: 01:58</u> {P.WeC-}

3x23 Sarek

<u>E5: 00:03</u> {*P.Pi}/<u>E6: 00:26</u> {*P.Al}/<u>E7: 00:32</u> {*P.Pi}/<u>E8: 00:41</u> {P.Pi-}/<u>E9: 00:46</u> {M11}/<u>E11: 00:48</u> {P.WeC-}/<u>E12: 00:50</u> {*P.Pi, M12}/<u>E13: 00:51</u> {P.WeC-}/<u>E14: 00:52</u> {P.WeC+}/E15: 01:18 {P.WeC-}

3x24 Ménage à Troi

<u>E3: 00:03</u> {*P.Pi}/<u>E9: 00:09</u> {M7}/<u>E11: 00:13</u> {*P.Wo}/<u>E12: 00:18</u> {*P.Al}/<u>E13: 00:23</u> {M7}/<u>E14: 00:27</u> {*P.Al}/<u>E15: 00:39</u> {P.Ri+}

3x25 Transfigurations

<u>E5: 00:03</u> {*P.Pi}/<u>E6: 00:06</u> {M6}/<u>E7: 00:13</u> {P.Pi+, P.Wo-}/<u>E8: 00:30</u> {P.Wo+, P.LF-}/<u>E9: 00:53</u> {*P.Al}/<u>E10: 01:01</u> {*P.WSA, P.LF+}/<u>E11: 01:18</u> {P.Wo-}/<u>E12: 01:29</u> {P.LF-}/<u>E13: 01:31</u> {*P.Wo}/<u>E14: 01:36</u> {*P.Ya}/<u>E15: 01:51</u> {*P.BW, P.BW-}

3x26 The Best Of Both Worlds (1)

E3: 00:02 {*P.Pi}/E4: 00:10 {P.Al-}/E5: 00:13 {*P.Ya}/E6: 00:14 {M1}/E7: 00:15 {*P.Da}/E8: 00:18 {P.Al-}/E9: 00:24 {*P.Ya}/E11: 00:29 {*P.Da}/E12: 00:32 {*P.Ya}/E13: 00:35 {*P.Ri}/E14: 00:48 {*P.Ya}/E15: (OC) 03:25 {P.WeC-}

4x01 The Best Of Both Worlds (2)

Continuation of 3x26

4x02 Family

<u>E5: 00:04</u> {*P.Pi}/<u>E6: 00:16</u> {*P.Al}/<u>E7: 00:17</u> {*P.Ri}/<u>E8: 00:23</u> {M1, P.Wo+}/<u>E9: 00:41</u> {*P.Al}/<u>E11: 00:47</u> {*P.Wo, P.Wo-}/<u>E12: 01:02</u> {*P.BW}/<u>E13: 01:06</u> {*P.Ri}/E14: 01:15 {*P.Ya}/E15: 01:36 {P.Wo-}

4x03 Brothers

E1: 00:02 {*P.Pi}/E2: 00:29 {*P.Ri}/E3: 00:32 {*P.Da}/E9: 00:43 {P.Da-}/E11: 00:49 {*P.Da}/E12: 00:56 {*P.Al}/E13: 00:57 {*P.Da}/E14: 00:58 {*P.Al, M2, P.Da-, M3}/E15: 01:49 {P.Da+}

4x04 Suddenly Human

<u>E5: 00:02</u> {*P.Pi, P.Wo-}/<u>E6: 00:15</u> {M6}/<u>E7: 00:21</u> {*P.Pi}/<u>E8: 00:49</u> {P.Wo+, P.BW+}/<u>E9: 01:03</u> {P.Wo-}/<u>E11: 01:05</u> {*P.Wo}/<u>E12: 01:06</u> {*P.Al}/<u>E13: 01:07</u> {*P.WeC}/<u>E14: 01:07</u> {M13}/<u>E15: 01:09</u> {M14}

4x05 Remember Me

<u>E3: 00:01</u> {M1}/<u>E9: 00:02</u> {*P.BeC}/<u>E12: 00:30</u> {*P.BW}/<u>E13: 00:39</u> {M1}/<u>E14: 00:39</u> {*P.Ya, P.BeC-}/<u>E15: 00:53</u> {P.WeC-}

4x06 Legacy

<u>E3: 00:05</u> {*P.Ri}/<u>E9: 00:14</u> {P.Wo-}/<u>E11: 00:19</u> {*P.Da}/<u>E12: 00:21</u> {*P.Ya}/<u>E13: 00:23</u> {*P.Ri, P.Da+}/<u>E14: 00:28</u> {*P.Tr}/<u>E15: 00:48</u> {P.Da+}

4x07 Reunion

<u>E5: 00:04</u> {*P.Pi}/<u>E6: 00:14</u> {M6}/<u>E7: 00:16</u> {*P.Pi, P.Pi+}/<u>E8: 01:14</u> {M6}/<u>E9: 01:26</u> {*P.Ya}/<u>E11: 01:31</u> {*P.Wo}/<u>E12: 01:37</u> {*P.Pi}/<u>E13: 01:41</u> {*P.Wo}/<u>E14: 01:52</u> {*P.Al}/E15: 02:02 {*P.En}

4x08 Future Imperfect

<u>E3: 00:04</u> {*P.Pi}/<u>E9: 00:18</u> {*P.BeC}/<u>E11: 00:36</u> {P.Ri+}/<u>E12: 00:40</u> {*P.Tr}/<u>E13: 00:43</u> {*P.Ri}/<u>E14: 00:44</u> {M3, *P.Pi}/<u>E15: 00:50</u> {M14, P.Ri+}

4x09 Final Mission

<u>E3: 00:03</u> {*P.Pi}/<u>E9: 00:17</u> {*P.WeC}/<u>E11: 00:19</u> {*P.Wo}/<u>E12: 00:27</u> {*P.Pi}/<u>E13: 00:30</u> {*P.WeC}/E14: 00:39 {*P.Pi}/E15: 01:07 {M14}

4x10 The Loss

<u>E1: 00:07</u> {*P.BW, *P.Al, P.Al-}/<u>E2: 00:40</u> {P.BW-}/<u>E3: 00:46</u> {*P.BW}/<u>E9: 01:13</u> {P.BW-}/<u>E12: 01:19</u> {P.Al-}/<u>E13: 01:22</u> {P.BW-}/<u>E14: 01:28</u> {*P.Al}/<u>E15: 01:37</u> {P.BW-}

4x11 Data's Day

<u>E3: 00:02</u> {*P.Da}/<u>E9: 00:10</u> {*P.WeC}/<u>E11: 00:14</u> {*P.Da}/<u>E12: 00:19</u> {*P.Al}/<u>E13: 00:33</u> {M1}/E14: 00:37 {*P.Al}/E15: 00:38 {M14, P.Da+}

4x12 The Wounded

<u>E5: 00:02</u> {*P.Pi}/<u>E6: 00:07</u> {M6}/<u>E7: 00:14</u> {*P.Da}/<u>E8: 00:35</u> {P.Pi-}/<u>E9: 00:53</u> {M2}/<u>E12: 00:54</u> {P.Al-}/<u>E13: 00:57</u> {*P.Wo}/<u>E14: 01:02</u> {*P.Tr, P.Wo+}/<u>E15: 01:16</u> {P.Pi-, M14}

4x13 Devil's Due

<u>E5: 00:07</u> {P.BW-}/<u>E6: 00:18</u> {*P.A1}/<u>E7: 00:20</u> {*P.BW}/<u>E8: 00:49</u> {P.BW+}/<u>E9: 00:51</u> {P.Da-}/<u>E12: 00:54</u> {*P.BW}/<u>E13: 00:56</u> {P.BW-}/<u>E14: 00:57</u> {*P.Pi}/<u>E15: 00:58</u> {P.Da+}

4x14 Clues

<u>E3: 00:07</u> {*P.Ri}/<u>E9: 00:12</u> {*P.LF, P.Al+}/<u>E12: 00:24</u> {P.Al-}/<u>E13: 00:37</u> {*P.Gu}/<u>E14: 00:39</u> {*P.Al}/<u>E15: 00:41</u> {M14}

4x15 First Contact

<u>E5: 00:04</u> {*P.Ri}/<u>E6: 00:10</u> {M1}/<u>E7: 00:18</u> {*P.Ri}/<u>E8: 00:24</u> {M6}/<u>E9: 00:34</u> {*P.Ya}/<u>E11: 00:36</u> {M6}/<u>E12: 00:38</u> {*P.Ya}/<u>E13: 00:40</u> {*P.Wo}/<u>E14: 00:42</u> {*P.Ya}/<u>E15: 01:00</u> {P.Ri+}

4x16 Galaxy's Child

<u>E5: 00:04</u> {*P.Pi}/<u>E6: 00:11</u> {*P.Al}/<u>E7: 00:16</u> {*P.Pi}/<u>E8: 00:21</u> {M1}/<u>E9: 00:28</u> {M11}/<u>E10: 00:45</u> {P.LF+}/<u>E11: 00:56</u> {*P.LF²²}/<u>E12: 01:02</u> {*P.Pi}/<u>E13: 01:04</u> {*P.LF}/<u>E14: 01:06</u> {*P.Pi}/<u>E15: 01:08</u> {P.LF+}

^{22 (4}x16 E11) Compare to 4x24 E11, P.LF not longer positively affected

4x17 Night Terrors

E3: 00:02 {*P.Pi}/E4: 00:15 {P.Al-}/E5: 00:21 {*P.Pi}/E6: 00:24 {*P.Al}/E7: 00:25 {*P.Ri}/E8: 00:32 {P.Al-}/E9: 00:43 {P.Tr-}/E11: 00:57 {*P.Wo}/E12: 01:00 {*P.Tr}/E13: 01:01 {*P.Ri}/E14: 01:03 {*P.Tr}/E15: 01:29 {P.Al+}

4x18 Identity Crisis

E4: 00:01 {M10}/E5: 00:06 {*P.Ya}/E6: 00:10 {M6}/E7: 00:14 {*P.LF}/E8: 01:00 {P.Wo+}/E9: 01:15 {*P.Ya}/E12: 01:20 {*P.BW}/E13: 01:22 {P.BW-}/E14: 01:23 {*P.Pi}/E15: 01:29 {P.Al+}

4x19 The Nth Degree

<u>E1: 00:03</u> {*P.Ko}/<u>E2: 00:05</u> {*P.BeC}/<u>E3: 00:12</u> {*P.Ko}/<u>E9: 00:17</u> {*P.BeC}/<u>E11: 00:27</u> {*P.Ko}/<u>E12: 00:31</u> {*P.Al}/<u>E13: 00:34</u> {*P.Ko}/<u>E14: 00:34</u> {*P.Al}/<u>E15: 00:39</u> {P.Ko-}

4x20 Qpid

E5: 00:04 {*P.Pi}/E6: 00:13 {*P.Al}/E7: 00:16 {P.Pi+}/E8: 00:25 {M1}/E9: 00:27 {M7}/E11: 00:37 {P.Pi-}/E12: 00:39 {*P.Pi}/E13: 00:46 {M7}/E14: 00:53 {*P.Tr}/E15: 01:01 {P.Al+}

4x21 The Drumhead

<u>E3: 00:02</u> {*P.Pi}/<u>E9: 00:26</u> {P.Wo-}/<u>E12: 00:27</u> {*P.BW}/<u>E13: 00:29</u> {*P.Wo}/<u>E14: 00:35</u> {*P.Tr}/<u>E15: 00:42</u> {M14}

4x22 Half A Life

<u>E3: 00:05</u> {*P.Tr}/<u>E9: 00:12</u> {P.Tr-}/<u>E11: 00:22</u> {P.Pi-}/<u>E12: 00:26</u> {*P.Pi}/<u>E13: 00:33</u> {P.Pi-}/<u>E14: 00:36</u> {*P.Pi}/<u>E15: 00:41</u> {P.Pi-}

4x23 The Host

<u>E5: 00:02</u> {*P.BeC}/<u>E6: 00:12</u> {*P.Al}/<u>E7: 00:15</u> {*P.WeC}/<u>E8: 00:18</u> {P.WeC-}/<u>E9: 00:24</u> {*P.BeC}/<u>E11: 00:32</u> {*P.Da}/<u>E12: 00:35</u> {*P.BeC}/<u>E13: 00:41</u> {*P.Da}/<u>E14: 00:43</u> {*P.Al}/<u>E15: 00:46</u> {P.Ya+}

4x24 The Mind's Eye

E5: 00:04 {*P.LF}/<u>E6</u>: 00:16 {*P.A1}/<u>E7</u>: 00:38 {P.LF+}/<u>E8</u>: 00:54 {P.LF-}/<u>E9</u>: 01:14 {M7}/<u>E10</u>: 01:26 {P.LF+}/<u>E11</u>: 01:29 {*P.LF²³}/<u>E12</u>: 01:44 {P.LF-}/<u>E13</u>: 01:50 {*P.LF}/<u>E14</u>: 02:00 {*P.BW}/<u>E15</u>: (OC) 04:38 {P.Wo-}

^{23 (4}x24 E11) Compare to 4x16 E11, P.LF not longer positively affected

4x25 In Theory

<u>E3: 00:01</u> {*P.Pi}/<u>E9: 00:49</u> {P.BW-}/<u>E12: 00:50</u> {*P.BW}/<u>E13: 00:52</u> {*P.Wo}/<u>E14: 00:58</u> {*P.BW}/<u>E15: 01:07</u> {P.BW-}

4x26 Redemption (1)

<u>E3: 00:03</u> {*P.Pi}/<u>E9: 00:32</u> {P.Wo-}/<u>E10: 00:34</u> {P.Wo+}/<u>E11: 00:44</u> {P.Pi-}/<u>E12: 00:46</u> {*P.Pi}/<u>E13: 00:50</u> {*P.Wo}/<u>E14: 00:54</u> {*P.Pi}/<u>E15: 01:01</u> {P.Wo-}

5x01 Redemption (2)

Continuation of 4x26

5x02 Darmok

<u>E3: 00:03</u> {*P.Pi}/<u>E9: 00:12</u> {P.Da-}/<u>E11: 00:14</u> {*P.Da, M6}/<u>E12: 00:16</u> {*P.Pi}/<u>E13: 00:23</u> {*P.Da}/<u>E14: 00:27</u> {*P.Tr, M13}/<u>E15: 00:44</u> {P.Da+}

5x03 Ensign Ro

<u>E3: 00:01</u> {*P.Pi, P.Pi-}/<u>E9: 00:04</u> {P.BW-}/<u>E12: 00:06</u> {*P.BW}/<u>E13: 00:10</u> {P.Pi-}/<u>E14: 00:15</u> {*P.Pi}/<u>E15: 00:18</u> {P.Pi-}

5x04 Silicon Avatar

<u>E3: 00:01</u> {*P.Al}/<u>E9: 00:25</u> {M11}/<u>E12: 00:36</u> {*P.BW}/<u>E13: 00:47</u> {*P.Ri}/<u>E14: 00:50</u> {*P.Ya, P.Ya-}/<u>E15: 01:36</u> {P.Ri+, P.Ya+}

5x05 Disaster

E5: 00:02 {*P.Pi}/E6: 00:09 {M1}/E7: 00:14 {*P.Da}/E8: 00:19 {P.BW+}/E9: 00:20 {*P.Ya}/E12: 00:22 {*P.BW}/E13: 00:23 {*P.Ri}/E14: 00:28 {*P.BW, M3}/E15: 00:30 {P.BW-}

5x06 The Game

<u>E5: 00:06</u> {*P.Ri, *P.WSA}/<u>E6: 00:23</u> {M6}/<u>E7: 00:25</u> {*P.Ri}/<u>E8: 00:59</u> {P.Ri-}/<u>E9: 01:16</u> {M2}/<u>E11: 01:33</u> {*P.WSA}/<u>E12: 02:13</u> {*P.Al}/<u>E13: 02:22</u> {P.Ri+}/<u>E14: 02:30</u> {M2}/<u>E15: 02:54</u> {P.Ri+}

5x07 Unification (1)

E3: 00:12 {*P.Pi}/E9: 00:24 {*P.Gu}/E11: 00:30 {P.Pi-}/E12: 00:38 {*P.Pi}/E13: 00:41 {*P.Gu}/E14: 00:41 {*P.Ya, *P.WeC, P.WeC+}/E15: 00:47 {P.WeC-}

5x08 Unification (2)

Continuation of 5x07

5x09 A Matter of Time

E1: 00:01 {*P.Pi}/E2: 00:18 {*P.Ya}/E3: 00:24 {M1}/E9: 00:26 {*P.LF}/E12: 00:26 {P.LF-}/E13: 00:29 {*P.Ri}/E14: 00:37 {P.Al-}/E15: 00:45 {M14}

5x10 New Ground

<u>E3: 00:01</u> {*P.Pi}/<u>E9: 00:16</u> {*P.LF}/<u>E10: 0:21</u> {P.LF+}/<u>E12: 00:59</u> {P.LF-}/<u>E13: 01:04</u> {*P.Wo}/<u>E14: 01:13</u> {*P.BW}/<u>E15: 01:25</u> {M14}

5x11 Hero Worship

E5: 00:03 {*P.Pi}/E6: 00:09 {*P.Al}/E7: 00:17 {*P.Da}/E8: 00:18 {M1}/E9: 00:19 {*P.Gu}/E11: 00:22 {*P.Da}/E12: 00:25 {*P.Pi}/E13: 00:26 {*P.Gu}/E14: 00:28 {*P.Al}/E15: 00:41 {P.Al+}

5x12 Violations

<u>E3: 00:03</u> {*P.Pi}/<u>E9: 00:23</u> {M7}/<u>E11: 00:31</u> {*P.Wo}/<u>E12: 00:36</u> {*P.BW}/<u>E13: 00:38</u> {*P.Wo, P.BW-}/<u>E14: 00:46</u> {*P.BeC}/<u>E15: 01:03</u> {P.BW-}

5x13 The Masterpiece Society

E4: 00:01 {*P.Al}/E5: 00:02 {*P.Pi}/E6: 00:09 {*P.Al}/E7: 00:14 {*P.Da}/E8: 00:15 {M1}/E9: 00:20 {*P.Al}/E12: 00:21 {*P.BW}/E13: 00:25 {*P.Ri}/E14: 00:25 {P.Ri-, *P.BW}/E15: 00:45 {P.Al+, P.BW-}

5x14 Conundrum

<u>E3: 00:03</u> {*P.Pi}/<u>E9: 00:28</u> {P.Tr-}/<u>E11: 00:37</u> {*P.Da}/<u>E12: 00:37</u> {*P.Tr}/<u>E13: 00:39</u> {P.Tr-}/E14: 00:49 {P.Da-}/E15: 01:24 {P.Da+}

5x15 Power Play

E3: 00:03 {*P.Pi}/E4: 00:15 {P.Al-}/E5: 00:16 {*P.Pi}/E6: 00:24 {*P.Al}/E7: 00:26 {*P.Da}/E8: 00:30 {M6, P.Al-}/E9: 00:47 {*P.Al}/E11: 00:51 {*P.Da}/E12: 00:51 {M10}/E13: 00:56 {*P.Da}/E14: 00:57 {P.Al-, M13}/E15: (OC) 3:35 {M14}

5x16 Ethics

<u>E3: 00:07</u> {*P.Ya}/<u>E9: 00:09</u> {*P.LF}/<u>E11: 00:09</u> {*P.Wo, P.Tr-}/<u>E12: 00:17</u> {*P.Ya}/E13: 00:18 {*P.Wo}/E14: 00:19 {*P.Tr}/E15: 00:21 {P.Tr-}

5x17 The Outcast

<u>E3: 00:03</u> {*P.Pi}/<u>E4: 00:13</u> {P.Al-}/<u>E5: 00:16</u> {*P.Da}/<u>E6: 00:23</u> {M6}/<u>E7: 00:26</u> {*P.Da}/<u>E8: 00:26</u> {M6, P.Al-}/<u>E9: 00:40</u> {*P.Al}/<u>E12: 00:42</u> {P.Al-}/<u>E13: 00:46</u> {*P.Da}/<u>E14: 00:46</u> {*P.Pi}/<u>E15: (OC) 03:38</u> {M14}

5x18 Cause And Effect

<u>E1: 00:01</u> {M1}/<u>E2: 00:05</u> {*P.Ri}/<u>E3: 00:06</u> {*P.Da}/<u>E9: 00:14</u> {*P.LF}/<u>E11: 00:15</u> {P.En-}/<u>E12: 00:16</u> {*P.Tr}/<u>E13: 00:20</u> {*P.Ri}/<u>E14: 00:20</u> {*P.Al}/<u>E15: 00:28</u> {*P.En}

5x19 The First Duty

<u>E3: 00:04</u> {*P.Pi}/<u>E9: 00:15</u> {*P.WeC}/<u>E11: 00:22</u> {*P.Wo}/<u>E12: 00:23</u> {*P.Pi}/<u>E13: 00:27</u> {*P.Da}/E14: 00:32 {*P.Pi}/E15: 01:03 {P.Pi-}

5x20 Cost Of Living

<u>E3: 00:02</u> {*P.Wo}/<u>E9: 00:05</u> {M2}/<u>E12: 00:08</u> {P.Al-}/<u>E13: 00:13</u> {*P.Wo}/<u>E14: 00:15</u> {P.Al-, P.Ya-}/E15: 00:27 {M14}

5x21 The Perfect Mate

<u>E3: 00:01</u> {*P.Al}/<u>E9: 00:09</u> {M2}/<u>E11: 00:10</u> {*P.Wo}/<u>E12: 00:17</u> {*P.Pi}/<u>E13: 00:18</u> {M7}/<u>E14: 00:19</u> {*P.Ya}/<u>E15: 00:24</u> {P.Al+}

5x22 Imaginary Friend

<u>E3: 00:11</u> {*P.Tr}/<u>E9: 00:15</u> {M7}/<u>E12: 00:25</u> {*P.BW}/<u>E13: 00:25</u> {P.BW-}/<u>E14: 00:28</u> {*P.Tr}/<u>E15: 00:48</u> {*P.En}

5x23 I, Borg

<u>E3: 00:03</u> {*P.Pi}/<u>E9: 00:16</u> {M11}/<u>E11: 00:26</u> {*P.Da}/<u>E12: 00:30</u> {*P.Al}/<u>E13: 00:32</u> {*P.Da}/<u>E14: 00:32</u> {*P.Al}/<u>E15: 01:13</u> {M14}

5x24 The Next Phase

<u>E3: 00:08</u> {*P.Pi}/<u>E9: 00:18</u> {P.BW-}/<u>E12: 00:22</u> {*P.BW}/<u>E13: 00:27</u> {P.BW-}/<u>E14: 00:30</u> {*P.Pi}/<u>E15: 00:34</u> {P.BW-}

5x25 The Inner Light

<u>E5: 00:02</u> {*P.Pi}/<u>E6: 00:14</u> {*P.Al}/<u>E7: 00:15</u> {*P.Pi}/<u>E8: 00:35</u> {P.Al-}/<u>E9: 00:44</u> {M2}/<u>E11: 00:46</u> {*P.Da}/<u>E12: 00:49</u> {*P.Al}/<u>E13: 00:51</u> {*P.Wo}/<u>E14: 00:53</u> {*P.Al}/<u>E15: 00:54</u> {P.Pi-}

5x26 Time's Arrow (1)

E3: 00:01 {*P.Al}/E4: 00:17 {M10}/E5: 00:19 {*P.BW}/E6: 00:19 {*P.Al}/E7: 00:21 {*P.Pi}/E8: 01:00 {P.Al-}/E9: 01:06 {*P.Al}/E10: 01:07 {*P.Da}/E11: 01:08 {M6}/E12: 01:13 {*P.BW}/E13: 01:16 {*P.Da}/E14: 01:17 {*P.Al}/E15: 01:29 {*P.En}

5 Appendix B

Short forms like *P.Pi, P.Pi+, P.Pi- are shortened to Pi, Pi+, Pi-. For a first view on the pattern season 1 (Appendix A) is recommended. There are detailed information provided for all appearances.

		1		ı	1	1	1					1	
	E3*	E4*	E5*	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15
6x02	Pi	Al-	Pi	Al	Ri	Al-	Al			Al-	Ko	Al	LF+
6x03	Pi	Al-	Da	M6	Ri	Al-	M2		Da	M2	Wo-	Al	Al+
6x04			Pi	Al	Ri	Al-	Al		M6	Pi	Da	Al	Al+
6x05	Pi						Al+		M5	Ya	LF	Ri-	M14
6x06	Pi	Al-	Pi+	Al	En	En-	BeC		En-	BeC	Ri	Pi	En
6x07			Pi	Tr	Pi+	Al-	Pi+			BW	Tr-	Tr	M14
6x08	Pi						LF		Da	Pi	LF	M2	Pi-
6x09			Ri	Al	BeC	Wo+	BeC			M12	Ri	BeC	M14
6x10	Al						M7			BW	Ri	Pi	M14
6x12	Da						LF		Da	Al	LF	Al	M4
6x13	Pi	Al-	Ri	Al	BeC	M6	M2		Wo	BeC	Ri	BeC	M4
6x14	Tr						Tr-			BW	Tr-	BW	Tr-
6x15			BeC	Al	BeC	Pi-	BeC		M6	BeC	Pi-	BeC	Pi-
6x16	Pi						BeC		M5	Pi	Pi-	M2	LF+
6x18	Pi	Al-	Pi	M1	Pi	M1	BeC			BW	Ri	BW	Da+
6x19	Da						M7		Pi-	Pi	M1	Pi	Pi-
6x20			Pi	M6	Pi	M1	Al		Pi-	Pi	Ri	Pi+	Pi-
6x21			Ri	Ri-	Da	Ri-	BeC			M12	Da	Ri-	Ri+
6x22	Al						BeC	-M1		BeC	M1	Al	LF+
6x23			Da	M1	Ri	M6	Ya		Da	BW	Ri	Wo+	Wo-
6x24			Pi	Al	Da	Al-	Al		Ri+	BeC	Ri+	Tr	Ri+
6x25			BeC	Ri-	Ri	Ri-	BeC		Wo	BeC	Ri	BeC	Da+
6x26	Da						Al+		Da	BW	BW-	BW+	BW-

Table 6: The pattern for season 6.

The following table contains the attempt to apply the pattern after the opening credits. For grouped appearances like $\{Tr, Ri\}$ both persons appear at the same time. For 1x08, 1x12, 1x15, 1x19 and 1x23 were no further event found for 01:30 min.

	E3*	E4*	E5*	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15
1x03	Al						BeC		M6	Pi	M6	Al	Da+
1x04	{Da,	Tr}					Wo+	??					
1x05	Wo						M2		En-	Pi	LF	Al, En-??	
1x06	En						WeC		{Ko,	Ya??}			
1x07			Wo	M1	BeC	M6	Wo-		Wo	BeC	LF	Pi	Wo-
1x08			Pi	Al	Ya	??							
1x09	Wo						BeC		M6	Pi	Wo	Pi	Pi-
1x10			Pi	Al	Ya	Ya-??	1						
1x11	{Tr, F	Ri}					Tr-	Ri-??					
1x12			Pi	Al	Pi	M1	Al	??					
1x13			Ri	Al	Ri	M6	Ya		Da	Ya	Da	Ya	M14
1x14	Al						WeC			BW	Ri	Tr	En
1x15			Ri	Al	Ri	Al-	Ya		En-	En	LF	Ya	??
1x16	Al						LF		Da	Pi	WeC	Al	WeC-
1x17	Pi						LF			BW	M6	Pi	En
1x18	Al, B	W, {R	i, Tr, Y	'a, Da,	LF??}	}							
1x19	Al, M	I1, {W	o, Ko,	Pi}			??						
1x20	Wo						Wo-		Da	M12	Ri	Al	M14
1x21	Al	Al-	Da	M6	Ri	M6	Al	{Pi, T	r, Wo	??}			
1x22			Wo	Al	Da	M6	Al		Da	BW	Wo	Al	M14
1x23			Pi	Al	Ya	En-	En		Da	Pi	Da	Pi	??
1x24	Al						LF			BW	Da	Pi	BW-
1x25	Al						LF		Da	Al	Da	Al	M14
1x26	Al						LF		Da	BW	Ri	BW	M14

Table 7: Content of Appendix C

6 Appendix C

1x03 The Naked Now

E3: (OC) 05:55 {*P.Al, P.Pi-}/E9: 06:08 {*P.BeC}/E11: 06:14 {M6}/E12: 06:17 {*P.Pi}/E13: 06:36 {M6}/E14: 06:42 {*P.Al}/E15: 06:48 {P.Da+}

1x04 Code Of Honor

E3: (OC) 05:18 {*P.Da, *P.Ya, *P.Wo, P.Wo+??}

1x05 The Last Outpost

<u>E3: (OC) 05:38</u> {*P.Wo}/<u>E9: 05:54</u> {M2}/<u>E11: 05:58</u> {P.En-}/<u>E12: 06:00</u> {*P.Pi}/<u>E13: 06:04</u> {*P.LF}/E14: 06:09 {*P.Al, P.En-??}

1x06 Where No One Has Gone Before

E3: (OC) 05:28 {*P.En}/E9: 05:43 {*P.WeC}/E11: 05:54 {*P.Ko, M1, *P.Ya??}

1x07 Lonely Among Us

<u>E5: (OC) 05:57</u> {*P.Wo, P.Wo-}/<u>E6: 05:58</u> {M1}/<u>E7: 05:59</u> {*P.BeC}/<u>E8: 06:02</u> {M6}/<u>E9: 06:13</u> {P.Wo-}/<u>E11: 06:21</u> {*P.Wo}/<u>E12: 06:40</u> {*P.BeC}/<u>E13: 06:43</u> {*P.LF}/<u>E14: 06:57</u> {*P.Pi}/<u>E15: 07:56</u> {P.Wo-}

1x08 Justice

E5: (OC) 04:15 {*P.Pi}/E6: 04:19 {*P.Al}/E7: 04:20 {*P.Ya}/E8: ??

1x09 The Battle

<u>E3: (OC) 05:26</u> {*P.Wo}/<u>E9: 05:27</u> {*P.BeC}/<u>E11: 05:27</u> {M6}/<u>E12: 05:28</u> {*P.Pi}/<u>E13: 05:34</u> {*P.Wo}/<u>E14: 05:38</u> {*P.Pi}/<u>E15: 05:40</u> {P.Pi-}

1x10 Hide And Q

<u>E5: (OC) 04:07</u> {*P.Pi}/<u>E6: 04:10</u> {*P.Al}/<u>E7: 04:13</u> {*P.Ya, P.Ya-??}

1x11 Haven

<u>E3: (OC) 04:39</u> {*P.Tr, *P.Ri}/<u>E9: 05:11</u> {P.Tr-, P.Ri-??}

1x12 The Big Goodbye

<u>E5: (OC) 05:40</u> {*P.Pi}/<u>E6: 05:59</u> {*P.Al}/<u>E7: 06:05</u> {*P.Pi}/<u>E8: 07:12</u> {M1}/<u>E9: 07:23</u> {*P.Al}/<u>E10: ??</u>

1x13 Datalore

<u>E5: (OC) 05:14</u> {*P.Ri}/<u>E6: 05:20</u> {*P.AI}/<u>E7: 05:29</u> {*P.Ri}/<u>E8: 05:33</u> {M6}/<u>E9: 05:36</u> {*P.Ya}/<u>E11: 05:47</u> {*P.Da, *P.Ri}/<u>E12: 05:48</u> {*P.Ya}/<u>E13: 05:51</u> {*P.Da}/<u>E14: 05:59</u> {M13}/E15: 06:24 {M14}

1x14 Angel One

<u>E3: (OC) 04:23</u> {*P.A1}/<u>E9: 04:31</u> {*P.WeC}/<u>E12: 04:32</u> {*P.BW}/<u>E13: 04:34</u> {*P.Ri}/E14: 04:38 {*P.Tr}/E15: 05:02 {*P.En}

1x15 11001001

<u>E5: (OC) 07:03</u> {*P.Ri}/<u>E6: 07:08</u> {*P.Al}/<u>E7: 07:15</u> {*P.Ri}/<u>E8: 07:52</u> {P.Al-, P.En-}/<u>E9: 08:05</u> {*P.Ya}/<u>E11: 08:08</u> {P.En-}/<u>E12: 08:20</u> {*P.En}/<u>E13: 08:28</u> {*P.LF}/E14: 08:34 {*P.Ya, P.BeC-}/E15: ??

1x16 Too Short A Season

<u>E3: (OC) 04:54</u> {*P.Al}/<u>E9: 04:55</u> {*P.LF}/<u>E11: 04:59</u> {*P.Da}/<u>E12: 05:05</u> {*P.Pi, *P.Al}/<u>E13: 05:10</u> {*P.WeC}/<u>E14: 05:10</u> {*P.Al}/<u>E15: 05:36</u> {P.WeC-}

1x17 When The Bough Breaks

<u>E3: (OC) 04:58</u> {*P.Pi}/<u>E9: 05:22</u> {*P.LF}/<u>E12: 05:24</u> {*P.BW}/<u>E13: 05:25</u> {M6}/<u>E14: 05:27</u> {*P.Pi}/<u>E15: 05:34</u> {*P.En}

1x18 Home Soil

E3: (OC) 05:02 {*P.Al, *P.BW, *P.Da, *P.LF??}

1x19 Coming of Age

<u>E3: (OC) 04:01</u> {*P.Wo, *P.Pi, P.Wo+??} 1x20 Heart Of Glory

E3: (OC) 05:01 {*P.Wo}/E9: 05:10 {P.Wo-}/E11: 05:14 {*P.Da}/E12: 05:30 {M12}/E13: 05:31 {*P.Ri}/E14: 05:48 {*P.Al}/E15: 06:07 {M14}

1x21 The Arsenal Of Freedom

<u>E3: (OC) 05:48</u> {*P.Al, *P.Pi}/<u>E4: 05:55</u> {P.Al-, *P.Al}/<u>E5: 06:10</u> {*P.Da}/<u>E6: 06:16</u> {M6}/<u>E7: 06:18</u> {*P.Ri}/<u>E8: 06:31</u> {M6}/<u>E9: 06:34</u> {*P.Al, *P.Tr, *P.Wo??}

1x22 Symbiosis

<u>E5: (OC) 06:04</u> {*P.Wo}/<u>E6: 06:06</u> {*P.Al}/<u>E7: 06:08</u> {*P.Da}/<u>E8: 06:09</u> {M6}/<u>E9: 06:14</u> {*P.Al}/<u>E11: 06:16</u> {*P.Da}/<u>E12: 06:17</u> {*P.BW}/<u>E13: 06:19</u> {*P.Wo}/<u>E14: 06:20</u> {*P.Al}/<u>E15: 06:25</u> {M14}

1x23 Skin Of Evil

<u>E5: (OC) 04:47</u> {*P.Pi}/<u>E6: 04:54</u> {*P.Al}/<u>E7: 05:04</u> {*P.Ya}/<u>E8: 05:21</u> {P.En-}/<u>E9: 05:28</u> {*P.En, *P.Al}/<u>E11: 05:41</u> {*P.Da}/<u>E12: 05:52</u> {*P.Pi}/<u>E13: 05:53</u> {*P.Da}/<u>E14: 05:58</u> {*P.Pi}/E15: ??

1x24 We'll Always Have Paris

<u>E3: (OC) 05:26</u> {*P.A1}/<u>E9: 05:26</u> {*P.LF}/<u>E12: 05:33</u> {*P.BW}/<u>E13: 05:35</u> {*P.Da}/<u>E14: 05:36</u> {P.BW+}/<u>E15: 05:46</u> {P.BW-}

1x25 Conspiracy

<u>E3: (OC) 05:47</u> {*P.Al, M1}/<u>E9: 05:50</u> {*P.LF}/<u>E11: 05:51</u> {*P.Da}/<u>E12: 05:53</u> {*P.Al}/E13: 05:54 {*P.Da}/E14: 05:55 {*P.Al}/E15: 06:04 {M14}

1x26 The Neutral Zone

<u>E3: (OC) 05:03</u> {*P.Al, *P.BW}/<u>E9: 05:39</u> {*P.LF}/<u>E11: 05:49</u> {*P.Da}/<u>E12: 05:56</u> {*P.BW}/<u>E13: 05:57</u> {*P.Ri}/<u>E14: 05:57</u> {*P.BW}/<u>E15: 06:16</u> {M14}

References

- [1] http://dx.doi.org/10.1371/journal.pone.0010613
- [2] http://www.northeastern.edu/news/stories/2010/02/network_science.html
- [3] Morgan, J. Naturally Good: The Behavioral History of Moral Development (from Charles Darwin to E.O. Wilson). Cloverdale Corporation, 2005, page 28
- [4] Shrout P, Fleiss J.Intraclass correlations: uses in assessing rater reliability. Psychol Bull, 1979, pages 420 428
- [5] Franklin, A. Shifting Standards: Experiments in Particle Physics in the Twentieth Century. University of Pittsburgh Press, 2013, page 51
- [6] http://www.bbc.co.uk/cult/st/interviews/fatjo/page5.shtml
- [7] http://www.webcitation.org/5ybc7Wqbr
- [8] Hardcastle, V. Constructing the Self. John Benjamins Publishing, 2008, page 105
- [9] Petronis A, Mill J. Brain, Behavior and Epigenetics. Springer, 2011, page 169
- [10] Armstrong, E. Bird Display. Cambridge University Press, 1965, page 198
- [11] Avise, J. Molecular Markers, Natural History and Evolution. Springer, 1994, page 100
- [12] Boundless. Microbiology. Boundless, 2013, page 873
- [13] http://www.jeffgreenwald.com/books/future-perfect/