The Speak Logic Project

We Promote Better Communication

Addendum

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Note: You can append this exercise at the end of Appendix C of Fundamental of Communication. We can refer to this exercise as exercise number 931.1'

931.1 '. From exercise number 783' we have learned and shown that Q has been used to help manage the stability of $\mathcal{L}(t)$. From exercise number 799', we have shown that

$$S = D_T + U_T$$

and if D_T is known then S can be adjusted and at t' it will be possible for $u(t)$ to be executed in the form of $h(t)$.

From exercise 922' we have learned and shown that our theory dependable characteristic enables us to have the following presentations

$$A'\big|_{t_1}, A'\big|_{t_2}, A'\big|_{t_3} \text{ and } A'\big|_{t_4}$$

From exercise 931' we have learned and shown that our disregard of previous presentations enables us to have new presentations. In this case, if we think that $A'\big|_{t_1} = 0$, then we have $A'\big|_{t_2}$ where

$$A'\big|_{t_2} = \left\{ A'\big|_{t_1} + A'\big|_{t_2} \right\}$$

As well as, if we think $A'\big|_{t_3} = 0$, then we have $A'\big|_{t_4}$, where

$$A'\big|_{t_4} = \left\{ A'\big|_{t_3} + A'\big|_{t_4} \right\}$$

To better understand the overall exercise, for each presentation show that S is nothing without the presentation. In other words, for

$$A'\big|_{t_1}, A'\big|_{t_2}, A'\big|_{t_3} \text{ and } A'\big|_{t_4}$$

Show that

$$S = 0$$

As well as for each presentation, show that S is something; in other words show that

$S = U_T$ for $A'\big|_{t_1}$, $A'\big|_{t_2}$, $A'\big|_{t_3}$ and $A'\big|_{t_4}$

The overall exercise is to show that $S = 0$ for each presentation and $S \neq 0$ for each presentation. Since at t' the principle is understood. In this case we can say that $S = U_T$. Show that at t'

$$S = U_T$$

Another way to say that, show that

$$S\big|_{t_1} = 0$$

$$S\big|_{t_2} = 0$$

$$S\big|_{t_3} = 0$$

$$S\big|_{t_4} = 0$$

$$S\big|_{t'} = U_T$$

And show that

$$S\big|_{t_1} \neq 0$$

$$S\big|_{t_2} \neq 0$$

$$S\big|_{t_3} \neq 0$$

$$S\big|_{t_4} \neq 0$$

Note: You can append this exercise at the end of Appendix C of Fundamental of Communication. We can refer to this exercise as exercise number 931.2'

931.2 '. From exercise number 683' we have identified the following presentations

$A'|_{t_1}, A'|_{t_2}, A'|_{t_3}$ and $A'|_{t_4}$

Where all those presentations are considered to be higher level presentations; from the same exercise, we have learned that $A'|_{t_1}$ is higher than $A'|_{t_2}$, $A'|_{t_2}$ is higher than $A'|_{t_3}$ and $A'|_{t_3}$ is higher than $A'|_{t_4}$. It is the same as saying that

$$A'|_{t_1} > A'|_{t_2} > A'|_{t_3} > A'|_{t_4}$$

In term of presentation at time, it is always good to look at it in this form

$$A' = \left\{ A'|_{t_1} + A'|_{t_2} + A'|_{t_3} + A'|_{t_4} \right\}$$

What is important here is that $A'|_{t_2}$ could not have happened without $A'|_{t_1}$; as well as $A'|_{t_3}$ could not have happed $A'|_{t_2}$ and $A'|_{t_4}$ could not have happened without $A'|_{t_3}$. If you want to, you can verify that by providing a practical example. In other words, show that $A'|_{t_2}$ does not exist without $A'|_{t_1}$ and $A'|_{t_3}$ does not existing without $A'|_{t_2}$ and $A'|_{t_4}$ does not exist without $A'|_{t_3}$. You can also add that $A'|_{t_1}$ does not existing without $Th_1|_{t_0}$.

This exercise requires a very good understanding of theory of education and also presentation and interpretation of theory.

The overall exercise is to show that

if $A'|_{t_1} = 0$; then $A'|_{t_2} = 0$

if $A'|_{t_2} = 0$; then $A'|_{t_3} = 0$

if $A'\big|_{t_3} = 0$; then $A'\big|_{t_4} = 0$

lastly if $Th_1\big|_{t_0} = 0$; then $A'\big|_{t_1} = 0$

931.3'. By working out the above exercise, show if you have not done so

if $A'\big|_{t_1} = 0$; then $A'\big|_{t_3} = 0$

if $A'\big|_{t_1} = 0$; then $A'\big|_{t_4} = 0$

if $A'\big|_{t_2} = 0$; then $A'\big|_{t_4} = 0$

931.4'. Show that if you have not done so from previous exercises

$$A'\big|_{t_4} = \left\{ A'\big|_{t_1} + A'\big|_{t_3} \right\}$$

$$A'\big|_{t_4} = \left\{ A'\big|_{t_1} + A'\big|_{t_4} \right\}$$

$$A'\big|_{t_4} = \left\{ A'\big|_{t_2} + A'\big|_{t_4} \right\}$$

931.5'. There is a relationship between $\mathscr{L}(t)$ and S where we have

$$S \Leftrightarrow \mathscr{L}(t)$$

At t' we know that $u(t)$ will be executed in the form of $h(t)$ with zero complexity on the functional system or with $C = 0$. This can also be written in the form of $C\left[\mathscr{L}(t)\right] = 0$. By understanding that, we can see in order for that to happen S must have control of $h(t)$. By understanding that, verify that the relationship between S and $\mathscr{L}(t)$ enables $u(t)$ to be executed in the form

$h(t)$ enables S to have control over $h(t)$. The way to look at it, if $STr\{T\}=u(t)$ and $u(t)=h(t)$, then S must have control of $h(t)$.

931.6'. By working out the above exercise, we have learned that if $u(t)=h(t)$ then $C\left[\mathscr{L}(t)\right]=0$. In other words, if added functions can be executed in the form of existing functions, then the complexity of the functional system is zero. Here show that if you have not done so already

$$C\left[\mathscr{L}(t)\right]=C\left[\sum_{n=1}^{N} h_n(t)\right]=0$$

Where N is the number of existing functions; in other words, show that the complexity of the functional system is equal to the complexity of all existing functions combined and equal to zero.

931.7'. U_T is given in the form of

$$U_T=\{T_1+T_2+T_3+T_4+T_5+T_6+T_7+T_8+T_9+T_{10}\}$$

This is the same as

$$U_T=\sum_{n=1}^{10} T_n$$

By having a good understanding of U_T, for each value of n show that

if $T_n=0$ then $U_T=0$

for instance at $n=3$ show that

if $T_3=0$ then $U_T=0$

931.8'. Given that added functions are not standalone, added functions executes in the form of

$$u(t)=h(t)+u(t)$$

In term of complexity of the functional system, we have

$$C\left[\mathscr{L}(t)\right]=C\left[h(t)\right]+C\left[u(t)\right]$$

If we assume $u(t)$ has a complexity of

$$C\left[u(t)\right]=\alpha^{N}$$

Then

$$C\left[h(t)\right]=\alpha^{N}$$

Here in term of complexity, show that

If $h(t)=0$ then $u(t)=0$

The way to look at it, since $u(t)$ cannot exist by itself, $u(t)$ always executes in the form of

$$u(t)=h(t)+u(t)$$

In this case, if $h(t)=0$ then $u(t)=0$

If you have not done so already, you may need to show the condition above first before showing it in term of complexity.