# Narratives and Therapeutic Conversational Agents: Their Principle Problems

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# 1 Narratives and Conversational Agents

"Narrative" is one of key words in the modern society. Giddens pointed out a central role of narratives of the self in some literatures on self-actualization in the late modern society [1]. Kobayashi claimed that there are increasing people trying to write life histories of themselves, and industries aiming at satisfying demand of these people like manuals for making narratives of selves, publishers, and so on, called "narrative industries", have appeared [2].

There is a possibility that the research field of artificial intelligence is also affected by this cultural trend. In fact, Sengers [3] argued introduction of narrative theories to architectures of artificial agents. The bartender agent produced by Isbister and Hayes–Roth [4] can be considered to be a successful one along the narrative approach. This agent was not strictly based on the narrative approach. However, the agent has her original background like her life history and encourages interaction with users based on the background.

# 2 Narrative Therapy

On the other hand, the word "narrative" has a therapeutic meanings in a field of psychology.

Narrative therapy [5] is one of therapeutic positions in family therapy [6]. Family therapy is originally based on family system theory that caused from cybernetics [7, 8]. In this theoretical framework, a family is a system that consists of its family members including clients and communication between them. It has a kind of homeostasis and the existence of the clients means a result of warped homeostasis in communication. Then, family therapists aim at perturbing the family system to improve states of the system by using autonomous capacity of the system. Several therapeutic techniques for this improvement have been developed [6].

However, some family therapists have recently been criticizing meta-positions of therapists for families based on this autonomous mechanism and empiricism existing behind the mechanism. They argue that power of therapists for clients caused by this empiricism oppresses clients themselves. Narrative therapy has been developing as a therapeutic attitude proposing that therapists must stay on equal terms with clients.

Narrative therapists assume that reality surrounding persons do not objectively exist independent from them, but is produced and maintained by "narratives" that are socially constructed through linguistic interaction between the persons. These narratives give consistency and structures for situations and events in lives of persons, and selves of them. Then, narrative therapists aim at re–organizing narratives on clients' selves that are talked by the clients and produce pain of them, and producing a novel narrative through conversation with the clients on equal terms with them, while removing professional positions of the therapists. For example, a discipline in narrative therapy represents this stance by using the word "not–knowing positions". Thus, narrative therapy does not mean a concrete therapeutic technique but just an attitude that therapists should have for clients [5].

### 3 Narrative Therapeutic Agents

There are some sociological works relating narrative therapy to conversational artificial agents.

Asano [9] critically considered a position of narrative therapy in the modern society while referring to some sociological works including Giddens [1] and Kobayashi [2] mentioned above. According to the perspective of narrative industries, narrative therapy is also just one of them in the field of mental therapy, that is, a commodified product satisfying demand of people trying to talk narratives of themselves. In fact, Giddens also pointed out that self-help books are commodified productions of self-actualization [1].

On the other hand, Ritzer's theory of McDonaldozation of Society argues that the principle of rationalization based on efficiency, calculability (quantification), predictability, and control by technology dominates many fields of modern society, including not only management and economy but also education [10]. According to this theory, the field of mental therapy is also affected by this principle of rationalization, and it implies introduction of computers to mental therapeutic fields since they satisfy the above conditions that the principle constitutes of.

The above sociological works have an important implication: commodification of narrative therapy and introduction of computers to mental therapy by the modern rationalism lead to conversational agents as substitution of narrative therapists. In fact, humans tend to positively evaluate even simple programs repeating specific words mechanically like Eliza and find their therapeutic meanings [11, 12]. If the design theory of narrative agents is developed, it may encourage commodification of narrative therapeutic agents.

# 4 Narrative Therapeutic Agents and Abusive Behaviors

On the other hand, Asano criticized narrative therapy as follows [9]. Narrative therapy functions by explicitly drawing things concealed in narratives which clients talk on themselves through conversation between therapists and them. However, the desire of people to talk narratives on themselves is also a desire to leave these concealed things concealed. If narrative theorists are not conscious for these facts, narrative therapy has a danger that it only repeats this desire of people.

The above statement can be interpreted as follows: Narrative therapy provides clients with alternative narratives about themselves instead of the dominant narrative producing pains of them. These alternative narratives are produced by explicitly drawing things concealed in narratives of clients through conversation between the clients and therapists staying on equal terms with the clients. There is no problem if clients consciously wish to produce alternative narratives about themselves with therapists. However, many people in the modern society wish to leave concealed things concealed in their narratives and maintain the existing narratives. These people may use narrative therapy as commodified productions to complement their existing narratives that should be originally modified.

This interpretation implies a possibility that interaction with narrative therapeutic agents may also just repeat desire of people to talk on themselves while leaving concealed things concealed in their narratives, which should be drawn in narrative therapeutic conversation between clients and therapists. In other words, narrative therapeutic agents may be used as commodified tools to complement narratives of people desiring to talk on themselves while leaving concealed things concealed in their narratives.

If narrative therapeutic agents do not have enough interaction capacity, they may not sufficiently satisfy desire of people to complement their narratives while leaving concealed things concealed. Then, these people may feel unpleasant for the agents and this unpleasantness may cause their abusive behaviors toward the agents. If these agents can explicitly draw things concealed in narratives which clients talk on themselves, these agents are contrary to these people's expectation. In the same way, these people may feel unpleasant for the agents and it may cause their abusive behaviors toward the agents.

Moreover, Giddens argued that reflexive construction of the self is a struggle against commodification, and there is a dilemma that narratives of the self must be constructed in circumstances in which personal appropriation is influenced by standardization of consumption [1]. On the other hand, mental therapy is a methodology of self-actualization in the modern society. However, introduction of artificial agents to mental therapy implies standardized commodification of mental therapy since implementation of therapeutic conversational agents needs standardization of therapeutic methods possible to be represented as computer programs. If clients aiming at constructing their narratives face to narrative therapeutic agents that are standardized commodification of mental therapy, the above dilemma in construction of the self may be made more explicit. This dilemma may cause unpleasantness of the clients and leads to their abusive behaviors toward the agents.

#### 5 Summary and Future Works

This paper suggested a possibility of development of conversational agents aimed for narrative therapeutic purposes, and abusive reactions of clients to the agents in the context of therapy in the modern society. The discussion in the paper still lacks the details on the theme of the self in the modern society and its relationships with therapy. This problem should be solved by more investigation of sociological works.

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