

## On Recanati's *Mental Files*

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### 1

Frege (1892) introduced us to the notion of a *sense* or a *mode of presentation*. Such objects were introduced to explain (or perhaps just model) a variety of mental and linguistic phenomena, such as the fact that a rational agent can believe that Hesperus is bright while also believing that Phosphorus is not bright, despite the fact that Hesperus is Phosphorus. But what are senses? Frege didn't give a direct answer, but he did suggest that we might (at least some of the time) express the sense of a proper name by using a definite description. So the sense of *Hesperus* might be 'given' by the description *the heavenly body that appears in the evening*, while the sense of *Phosphorus* might be 'given' by *the heavenly body that appears in the morning*. As is well-known, this descriptive characterization of senses faced a barrage of criticism in the 1970s by a number of philosophers working on singular terms (e.g. Kripke 1980). But in the wake of this critique, no stable consensus has emerged about how best to account for the phenomena in which Frege was interested.

In his book *Mental Files* (Recanati 2012), François Recanati proposes a novel non-descriptive account of these phenomena. Recanati identifies the sense of a singular term with a *mental file*, a mental representation whose primary function is to store information about an object. Although the mental file approach has been around for some time, Recanati does much to develop the picture.

On the mental file theory, a rational subject who believes that Hesperus is bright while also believing that Phosphorus is not bright, will have two distinct mental files,  $m_1$  and  $m_2$ . The first,  $m_1$ , will (a) refer to Venus, and (b) have the predicate IS BRIGHT inscribed in it. The second,  $m_2$ , will (a) refer to Venus, and (b) have the predicate IS NOT BRIGHT inscribed in it.<sup>1</sup> What makes the model non-descriptivist is the fact that, as Recanati puts it, the reference of a file is

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<sup>1</sup>One thing I find confusing about this picture is the way in which it blurs the line between mental syntax and semantic content. For example, Recanati says that mental files store 'information', but by this, he means that mental files contain predicates, which are further representations. Recanati discusses this sort of issue at various points (see, for example, footnote 10 on p. 38), though I can't say I fully grasp the picture. In any case, while I think these foundational issues are important, much of Recanati's discussion can be understood without settling them.

determined *relationally* not *satisfactorily*. File  $m_1$  refers to Venus not because Venus is the unique object that satisfies most of the predicates inscribed on  $m_1$ , but because  $m_1$  (or the owner of  $m_1$ ) stands in a certain relation of acquaintance to Venus.

I discuss three aspects of Recanati's book. The first concerns his use of acquaintance relations in individuating mental files, and what this means for 'file dynamics'. The second concerns his comments on a theory that I have elsewhere advocated, the *sequenced worlds* or *multi-centered worlds theory*. The third concerns how the mental file approach handles non-doxastic attitudes like imagining.

## 2

The emphasis on relations of acquaintance (or 'epistemically rewarding' (ER) relations) is one of the more distinctive features of Recanati's version of the mental file theory. On Recanati's view – what he calls the *indexical model* –

...files are typed by their function, which is to store information derived through certain types of relation to objects in the environment.  
The type of the file corresponds to certain types of relation to objects in the environment. (Recanati 2012, viii)

Each file  $m$  corresponds to an acquaintance relation  $R_m$ . If a file  $m$  refers, it refers to the object to which the file (or the subject) bears the corresponding relation  $R_m$ .

The mental file picture is often presented in highly metaphorical and programmatic terms. In tying the individuation of files to acquaintance relations, Recanati adds more detail to the picture. But the use of highly contextual acquaintance relations to individuate files also creates a potential problem. Consider, for example, this passage from the book:

... a file... exists... only as long as the subject is in the right acquaintance relation to some entity... The mode of presentation HERE which occurs in my current thoughts concerning this place is a temporary mental file dependent upon my present relation to the place in question... When I leave this room, I can no longer think of this room as HERE; I have to think of it under a different mode of presentation. (Recanati 2012, 61)

Because our relations to objects in the world are in constant flux as we move through space and time, Recanati's account has the consequence that we frequently lose access to certain modes of presentation (whilst gaining access to others).

Let me change the example from locational thought (*here, there*) to temporal thought (*now, then*).<sup>2</sup> Suppose that, at time  $t_1$ , I look at my watch and think

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<sup>2</sup>The discussion that follows is influenced in various ways by Evans (1981).

to myself, *It's 1:00pm now*. Later (at  $t_2$ ) I come to think, *Actually, it wasn't 1:00pm then; I forgot to change my watch after the flight*. Intuitively, I changed my mind between  $t_1$  and  $t_2$  about whether it was 1:00pm at the time in question. But my initial thought employs a *now*-file  $\mu_1$ , while my later thought employs a *then*-file  $\mu_2$ . According to Recanati,  $\mu_1$  and  $\mu_2$  are distinct files or modes of presentation. But then why should this count as a change of mind? Normally, if I ascribe a property to an object  $o$  while thinking of it under mode of presentation  $m_1$  and then later ascribe an incompatible property to  $o$  while thinking of it under a distinct mode of presentation  $m_2$ , I do not thereby count as changing my mind. For example: I might think in the morning that Phosphorus is bright, but then think in the evening that Hesperus is not bright. If I am employing two distinct modes of presentation on these two occasions, this does not count as a change of mind. The reason for this seems to be that the two contents in question are not incompatible in the appropriate sense.

Although he doesn't explicitly discuss what is involved in changing one's mind, Recanati develops a framework that enables him to deal with this sort of objection (see Chapter 7 of *Mental Files*). Recanati could say that my *now*-file  $\mu_1$  is *converted* into my *then*-file  $\mu_2$ , where "conversion is the process through which information stored in a file is transferred into a successor file when the ER relation which sustains the initial file comes to an end" (Recanati 2012, 81). Presumably then changing one's mind involves: (i) having an initial file  $m_1$  that contains some information  $F$ ; (ii) having  $m_1$  converted into another file  $m_2$ ; and (iii) having the information  $F$  replaced with some incompatible information  $G$ .

Why all this complexity? Why not simply say that my *now*-file  $\mu_1$  is identical to my *then*-file  $\mu_2$ ? I think there are two reasons why Recanati would resist this suggestion. One is that files are supposed to fulfill the mode of presentation role, and Recanati (I suspect) thinks it is clear that when one thinks of a time as *now* and then later thinks of it as *then*, one is not thinking of it under the same mode of presentation (see e.g. Recanati 2012, 82). The other reason for thinking that  $\mu_1$  and  $\mu_2$  are distinct is that this seems to be a consequence of the indexical model, i.e. of individuating files by the acquaintance relations on which they are based. The *now*-file  $\mu_1$  is based on the relation that an agent-at-a-time  $x$ -at- $t$  bears to a time  $t'$  just in case  $t' = t$  and  $x$  is conscious at  $t'$ ; the *then*-file  $\mu_2$  is based on the relation that an agent-at-a-time  $x$ -at- $t$  bears to a time  $t'$  just in case  $x$  has, at  $t$ , an appropriate memory of  $t'$ .

I think neither of these reasons are compelling. First, note that Frege himself would not find it clear that *now*-thoughts and *then*-thoughts always involve different modes of presentation. A passage from Frege that Recanati (2012, 81) quotes helps to illustrate this:

If someone wants to say the same today as he expressed yesterday using the word "today", he must replace this word with "yesterday". Although the thought is the same its verbal expression must be different so that the sense, which would otherwise be affected by the differing times of utterance, is re-adjusted. (Frege 1956, 296)

Note: *the thought is the same*. Given Frege's other doctrines, this means that the mode of presentation associated with *today* on day  $d$  is the same as the mode of presentation associated with *yesterday* on the day after  $d$ . If modes of presentation are mental files, then the mental file involved in a *today*-thought on  $d$  should be the same file involved in a *yesterday*-thought on the following day.<sup>3</sup>

Why did Frege think this way? The notion of a mode of presentation was introduced in part to describe what we might call *rational relationships* between beliefs. Since a rational agent can believe that Hesperus is bright without believing that Phosphorus is bright, these beliefs must have different contents, and so the two modes of presentation for Venus must be different. Here we focus on the rational relationships between the beliefs of an agent at a single time. But we can also consider the rational relationships between two beliefs of an agent that are held at different times. The reason for thinking that my belief (*It is now 1:00pm*) at  $t_1$  and my belief (*It was not 1:00pm then*) at  $t_2$  involve the same mode of presentation is precisely that there is rational relationship between these two beliefs: they are incompatible, which partly explains why I count as having changed my mind between  $t_1$  and  $t_2$ .

Now Recanati is right that there is a perfectly good sense in which I am thinking of a time in two different ways when I think of it as *now* at one time and then later think of it as *then*.<sup>4</sup> But that notion of 'way of thinking' is not necessarily the one Frege was interested in. Frege's notion of mode of presentation is answerable to the project of capturing the rational relations between beliefs; it is not necessarily answerable to other intuitive (and perhaps theoretically important) notions of 'ways of thinking'.

The other reason Recanati has for distinguishing my *now*-file  $\mu_1$  from my *then*-file  $\mu_2$  is that this seems to follow from the acquaintance relations on which each file is based. This is because the acquaintance relations Recanati often appeal to are *unstable relations*, relations  $R$  such that if  $x$ -at- $t$  bears  $R$  to  $y$ , then  $x$ -at-later-time- $t'$  will often not bear  $R$  to  $y$ . But we could instead appeal to *stable relations*, relations  $R$  such that if  $x$ -at- $t$  bears  $R$  to  $y$ , then  $x$  might continue to bear  $R$  to  $y$  over a relatively longer period of time. For example, instead of thinking of the file  $\mu_1$  as based on the relation that  $x$ -at- $t$  bears to a time  $t'$  just in case  $t = t'$  and  $x$  is conscious at  $t'$ , we might think of it as based on:

the relation  $R$  that  $x$ -at- $t$  bears to a time  $t'$  just in case: either (i)  
 $t = t'$  and  $x$  is conscious at  $t'$ , or (ii)  $x$  has an appropriate memory  
of  $t'$  at  $t$ .

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<sup>3</sup>Although I am sympathetic to the general point Frege is making in the above passage, I think he was wrong about this particular example (as is Evans (1981, 308) who follows Frege on this point). If I think *today is warm* on a certain day, then in order to think that very same thought on the next day I must think an appropriate thought of the form *that day was warm*. The corresponding *yesterday*-thought isn't the very same thought, simply because I might fail to realize that 'that day' was yesterday. See Perry (1996) for discussion.

<sup>4</sup>As explored by Perry (1977, 1979), Lewis (1979), and others, *now*-thoughts differ from *then*-thoughts in terms of the actions they make rational.

Returning to our example, note that Dilip-at- $t_1$  bears this relation  $R$  to  $t_1$ , since  $t_1 = t_1$  and I was conscious at  $t_1$ . But note that later, at  $t_2$ , I *still* bear  $R$  to  $t_1$  since I have an appropriate memory of  $t_1$  at  $t_2$ . So we can identify my *now*-file  $\mu_1$  with my *then*-file  $\mu_2$ , and the relation  $R$  can serve as the basis for this file  $\mu_1/\mu_2$  at both times  $t_1$  and  $t_2$ . This allows us to follow Frege and say that, as I move through time, it is not the file or mode of presentation under which I think of  $t_1$  that changes, but only the linguistic means I use to express that file/mode.<sup>5</sup>

At one point, Recanati admits that longer-lasting files of this sort would have some advantages; he calls them *piles* and distinguishes them from *files proper* (Recanati 2012, 82). So perhaps the stable relations mentioned above could serve as the relations on which ‘piles’ are based. But this raises a further question: once we have stable relations and piles, what need is there for unstable relations and files proper?

### 3

At various points (e.g. pp. 23-24, 153-156), Recanati discusses Lewis’s *centered descriptivist* approach to *de se* and other *de re* thoughts (Lewis 1979, 1983a). Recanati rejects Lewis’s theory on the grounds that it gives a descriptivist treatment of *de re* thoughts. But, as Recanati notes, those objections do not apply to a non-descriptivist extension of Lewis’s theory, the *sequenced worlds* or *multi-centered worlds theory* (Torre 2010, Ninan 2008, 2010, 2012, 2013).

Suppose Lucy is a rational agent who believes, at time  $t$  in world  $w$ , that Phosphorus is bright, but that Hesperus is not bright. On the version of the multi-centered approach that Recanati considers, we characterize Lucy’s doxastic possibilities relative to Lucy’s *res sequence* at time  $t$  in world  $w$ . To understand this notion, think of all of the individuals  $y$  and acquaintance relations  $R$  such that Lucy bears  $R$  uniquely to  $y$  at  $t$  in  $w$ . If we take all of these pairs  $\langle y, R \rangle$  and arrange them into a sequence,  $\langle \langle y_1, R_1 \rangle, \dots, \langle y_n, R_n \rangle \rangle$ , we get Lucy’s *res sequence* at  $t$  in  $w$ . Now we can represent Lucy’s doxastic possibilities using *sequenced worlds*, triples consisting of a possible world, a time, and an  $n$ -ary sequence of individuals. The idea is this: If  $\langle y_n, R_n \rangle$  is the  $n$ th element of Lucy’s *res sequence*, then the  $n$ th element  $g'_n$  of a sequenced world  $\langle w', t', g' \rangle$  represents  $y_n$  relative to the acquaintance relation  $R_n$ .<sup>6</sup>

We assume that Lucy is acquainted with Venus in two ways but doesn’t realize this. So there are distinct elements of Lucy’s *res sequence*,  $\langle y_k, R_k \rangle$  and  $\langle y_j, R_j \rangle$ , such that: (i)  $y_k$  is Venus and  $R_k$  is some relation that Lucy bears to Venus, relative to which she believes that Venus is bright; and (ii)  $y_j$  is also Venus and  $R_j$  is another relation that Lucy bears to Venus, relative to which

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<sup>5</sup>One might object that this relation  $R$  is too disjunctive to really serve as the relation that enables me to think of  $t_1$  at these different times. There may be something to this objection, but on the other hand, it does seem like  $R$  corresponds to a genuine psychological process (cf. Evans 1981, 307).

<sup>6</sup>Essentially this version of the theory is presented in Ninan (2008, Ch. 3). The accounts discussed in Ninan (2012, 2013) are similar in spirit, but differ on some of the details.

she believes that Venus is not bright. We would then represent Lucy's state of mind by saying that all of the sequenced worlds  $\langle w', t', g' \rangle$  compatible with what Lucy believes at  $t'$  in  $w'$  are such that  $g'_k$  is bright at  $t'$  in  $w'$  and  $g'_j$  is not bright at  $t'$  in  $w'$ . Since there are sequenced worlds  $\langle w', t', g' \rangle$  such that  $g'_j$  is bright at  $t'$  in  $w'$  while  $g'_k$  is not bright at  $t'$  in  $w'$ , Lucy's belief state is predicted to be coherent. The proposal is non-descriptivist because, unlike Lewis's account, this account allows Lucy to have beliefs about an object  $y$  relative to an acquaintance relation  $R$  without believing that she bears  $R$  uniquely to anything.

While Recanati is sympathetic to the non-descriptive ambitions of this approach, he also believes the theory can be improved by bringing mental files into the picture. Recanati motivates the introduction of files by arguing that the present approach faces a limitation when it comes to accounting for beliefs that would be expressed involving empty singular terms:

Suppose [a] subject has an empty singular term in his repertoire, e.g. he thinks he has been followed all day long by someone (whom he thinks of as 'that guy who keeps following me') while actually there is no such person—nobody has been following him. In such a case, intuitively, there is one more object in the belief worlds than the subject is actually acquainted with in the base world. Ninan's revised framework does not allow him to represent that situation, for the number of objects in the *res*-sequence for every belief world has to match the number of acquaintance relations the subject actually bears to objects. Instead, the number of objects in the *res*-sequences in the belief worlds should correspond to the number of *files* in the subject's mind (based on *putative* acquaintance relations). (Recanati 2012, 258, *italics in the original*)

Recanati proposes a solution: replace Lucy's *res* sequence  $\langle \langle y_1, R_1 \rangle, \dots, \langle y_n, R_n \rangle \rangle$  with a *file-sequence*  $\langle m_1, \dots, m_k \rangle$ ,  $k \geq n$ , a sequence of Lucy's mental files at time  $t$  in world  $w$ . On this proposal, if Lucy is the subject who falsely believes someone has been following her around all day, then Lucy will have a file  $m_l$  that fails to correspond to anything that exists in her world  $w$ . But each of Lucy's sequenced belief worlds  $\langle w', t', g' \rangle$  will be such that  $g'_l$  is a man who is following her at  $t'$  in  $w'$ .

I am not necessarily opposed to Recanati's proposed amendment, but I wonder if it is required. For in describing his case, Recanati did something which we very naturally do when characterizing empty (putative) singular thoughts: he appealed to a description of the man that Lucy herself might give, viz. "that guy who keeps following me". But if Lucy's thought is really ultimately a *descriptive* thought, then no alteration of the sequenced worlds theory is needed, for we can say the following. Since Lucy is acquainted with herself via identity, there will be an element  $\langle y_h, R_h \rangle$  of her *res* sequence such that  $y_h$  is Lucy and  $R_h$  is the identity relation. So if Lucy believes that there is a unique man who keeps following her, we can say that all of the sequenced worlds  $\langle w', t', g' \rangle$  compatible with what Lucy believes at  $t$  in  $w$  relative to her *res* sequence  $\langle \langle y_1, R_1 \rangle, \dots, \langle y_n, R_n \rangle \rangle$  are such that there is a unique man following  $g'_h$  around at  $t'$  in  $w'$ .

Of course, one might argue that, at some level of mental representation, empty (putative) singular thoughts should be treated no differently than genuine singular thoughts. But I think this is not so clear. A non-descriptive approach to genuine singular thoughts is possible because we can characterize the agent's state of mind by appealing to the object in the world that the thought is about, and to the way in which the agent is related to that object. But since we lack these resources in cases of empty (putative) singular thoughts, all we have to go on are the qualitative properties that the agent believes are instantiated by the non-existent thing, along with the qualitative relations that the agent believes the non-existent thing bears to other existent things. From this perspective, a disjunctive treatment of these two kinds of cases seems quite natural.

## 4

One of the principal motivations for the multi-centered worlds theory is to deal with a problem facing the centered worlds view, a problem that concerns non-doxastic attitudes like imagining and wishing.<sup>7</sup> One thing I couldn't reconstruct from Recanati's book is how these sorts of attitudes are to be treated within the mental file framework.

The issue arises because Frege-type puzzles arise in connection with non-doxastic attitudes in much the same way in which they arise for the attitude of belief. Not realizing that Samuel Clemens is Mark Twain, Lucy might imagine a scenario in which Samuel Clemens is famous and Mark Twain is not. Since Lucy's imagining is fine-grained in a familiar way, modes of presentation presumably play some role in characterizing the content of her imagining. According to Recanati, modes of presentation are mental files, so presumably Lucy's *Clemens*-file and her *Twain*-file both play a role in characterizing the content of her imagining. But how exactly does this work?

Earlier, I described Recanati's treatment of doxastic Frege-type puzzles this way:

On the mental file approach, a rational subject who believes that Hesperus is bright while also believing that Phosphorus is not bright, will have two distinct mental files,  $m_1$  and  $m_2$ . The first,  $m_1$ , will (a) refer to Venus, and (b) have the predicate IS BRIGHT inscribed in it. The second,  $m_2$ , will (a) refer to Venus, and (b) have the predicate IS NOT BRIGHT inscribed in it.

On this picture, if an agent has a belief that involves a file/mode  $m$ , the content of that belief is linked to the predicates inscribed on  $m$ . But this account doesn't seem to extend to attitudes like imagining. For the predicates inscribed in Lucy's *Clemens*-file seem irrelevant to the content of her imagining. For suppose she believes that Clemens is not famous; then her *Clemens*-file will

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<sup>7</sup>See Ninan (2012, 2013) for details on both the problem and the multi-centered worlds solution. An alternative 'two-dimensional' solution can be found in Ninan (2008, Ch. 2) and Yanovich (2011).

contain the predicate IS NOT FAMOUS. But since she is imagining that he *is* famous, the content of her imagining must not be straightforwardly linked to the predicates inscribed on her *Clemens*-file. But that raises a question of how exactly the predicates inscribed in a file are related to attitudes that involve the file. In the case of belief, they seem to play an important content-fixing role; in the case of imagining, they do not. Why is there this asymmetry in the account?

Perhaps Recanati has a different picture in mind. Maybe Lucy's mind can be thought of as divided up into boxes corresponding to the different types of attitudes that she has: there is a belief box, a desire box, an imagination box, etc. Lucy's belief box contains a *Clemens*-file, as does her imagination box (perhaps these two files are in some way linked). If Lucy imagines that Clemens is famous and Twain is not, then the *Clemens*-file in her imagination box has the predicate IS FAMOUS inscribed on it, even though the *Clemens*-file in her belief box has the predicate IS NOT FAMOUS inscribed in it. The predicates inscribed on the files in her belief box are irrelevant to the content of her imagining.

Perhaps some such story could be told. But note one upshot of extending the account in this way: one can no longer characterize mental files as mental representations whose primary function is to carry information about objects. This characterization is true only of the files in the belief box. The function of the files in the imagination box, the desire box, etc. must be something else. Is this a problem? It doesn't show that the mental file theory is *false*, but it may threaten to push an already elusive metaphor further out of reach.

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