7. Conclusion

How does a psychiatrist know whether a patient is mentally ill and, if so, what their specific condition is? This question was the starting point of my inquiry. Refining this into what I called the Methodological Question, I considered what the method of proper, contemporary clinical diagnostic reasoning may be – a question that must be answered by philosophy of psychiatry if what we aim for is a systematic understanding of the various aspects of the epistemology of psychiatry. But beyond this interest for the sake of knowledge itself, answering the Methodological Question also has practical implications justifying its pursuit. These include motivations from ethics and matters of law, since only a sufficiently general understanding of what method should be pursued in contexts of diagnostics allows us to evaluate whether the diagnostic work of clinicians violates the standards of the proclaimed method. If we have enough information about the case, this kind of general understanding puts us in a position to determine whether harm caused to a patient due to a false diagnosis is the result of malpractice or cannot be blamed on the diagnostician. Also, only if we understand how diagnostic judgements are formed and justified can we make case-by-case decisions about situations in which patients' judgements about their mental conditions differ from clinicians' judgements, to evaluate whether there are better epistemic reasons to believe the psychiatrist or the patient. Both issues are highly relevant. They are too complex to have been explored in this thesis, but the groundwork for potential future discussion of such issues has now been laid.

Another more pragmatic implication that makes an answer to the Methodological Question desirable is its potential value for medical education. The model developed here has the potential to be used in the theoretical and practical training of psychiatrists. Not that the answer I have proposed has provided any medical details that would be of value for this, but it has provided an abstract description for a method and its steps that in any case of diagnostic practice might be a background algorithm that could be taught in medical education. This would mean that a clinician could, by working though the steps of the method, assess for themselves whether the concrete steps of the diagnostic work can be subsumed under the more general methodological framework I proposed. Also in medical education, concrete cases could, for educational purposes, be discussed along the lines of this model for psychiatric di-

agnostics, to show individuals pursuing medical education what kinds of principles and structures stand behind the confusing first impressions that a clinician new to clinician practice may have of the overall process.

A final proactive application for this work that we may envisage is its usefulness for research. One application area might be attempts to build automatised diagnostic programs working with patient data, or tools that are supposed to support clinicians in aspects of their diagnostic reasoning process; both could be modelled following the method proposed here. In the case of fully automated systems, for example, this would ensure that the systems operated according to the same standards, and by going through the same steps, that we expect to be adhered to by clinicians under ideal practical circumstances, which in turn may help us develop understandable and more trustworthy fully automated solutions for psychiatric diagnostics. Or, if we were simply aiming to develop tools to support diagnostic work, we could, for example, model systems that support differential diagnostic processes by providing propositional models to psychiatrists if they enter a complaint, helping them to ensure that they did not forget a potential evaluation, and providing them with a good user experience because the tool presents information in a format that is close to their own cognitive efforts. As we see, there are many reasons to try to answer the Methodological Question.

The answer to the Methodological Question I have presented in this thesis is the model-based account of diagnostic reasoning. It is intended to present a methodology providing us with a description of what can be understood to be the method behind the belief-forming procedures in psychiatric diagnostics, and explaining what the rationale behind the operations of these methods are and how this method is supposed to ensure that its results are justified. By being intended to meet these constraints, it should meet what I considered to be the adequacy conditions for an answer to the Methodological Question. In addition to this, in presenting my proposal I have aimed to provide a framework that would allow us to address psychiatric diagnostics in a way that is especially satisfactory regarding how it addresses diagnostic reasoning and several relevant phenomena in this context. I called these extra things I wanted from a proposal desiderata, and they are that the proposed answer should be comprehensive, cognitively realistic, helpful for making sense of the difference between misdiagnosis and diagnostic malpractice, accounting for the occurrence and resolution of diagnostic uncertainty, helpful for understanding and evaluating the phenomenon of good instinctual diagnostics and the occurrence and solution of diagnostic disagreements, and finally showing the right degree of robustness as well as falsifiability in relation to changes in psychiatric science and diagnostic practice.

The model-based account of diagnostic reasoning was developed to meet all these requirements. To sum up, the idea is that psychiatric diagnostics should be understood as a qualitative, constitutive diagnostic modelling process. To establish

this idea, I began by providing a conmonnsensical description of the constitutive core aspects of psychiatric diagnostics based on the psychiatric training and guild line literature representing the standard core procedures of proper contemporary diagnostic reasoning. I then spelled out the methodology that I intended to apply to the process of modelling thus understood. I explained what makes something modelling, described when modelling is qualitative and constitutive, and introduced the specific modelling framework of diagnostic modelling. Subsequently, I came back to the process of psychiatric diagnostics, this time looking at more particular clinical instances, and mapped out step by step the various features of the previously proposed methodology of the clinical diagnostic process, showing that the method of modelling I proposed, and accordingly the other aspects of the methodology behind it, seem to adequately apply to clinical psychiatric diagnostics. After providing this adequate methodology, I let my answer to the Methodological Question do some heavy lifting. I showed how each of the proposed desiderata is fulfilled by my account, making the model-based approach a satisfyingly adequate and indeed particularly fruitful answer to the Methodological Question. Since my own proposal is not the only game in town, I turned towards supposed alternatives to my account and potential criticisms that would apply to it. I evaluated each of the alternative proposals and responded to all the critical accounts under consideration, concluding that the model-based account is the most satisfying of all the proposals, and that the discussed criticism does no relevant harm to my proposal.

By introducing and defending the model-based account as the first systematic and fully mapped out approach to applying debates about modelling in philosophy of science to the topic of medical diagnostics, more specifically to psychiatric diagnostics, I hope to have made a stimulating contribution to debates in the epistemology of psychiatric diagnostics, a still small aspect of the overall debates in the field. I also hope to have provided an example of how debates from general philosophy of science, in this case about modelling, can be made fruitful in the application to discussions of aspects of special sciences and practices such as psychiatry. Finally, if anything I have done in these pages impacts any of the pragmatic concerns of psychiatry that I mentioned above – if it ever proves useful in medical education, inspires debates about policies on how to differentiate misdiagnosis, or inspires a developer in health tech to come up with a useful program or device, and indeed if it ever leads to something that that is of help to anyone seeking psychiatric treatment – I will consider this research to have served its purpose. Future work in these areas, through which I hope to build on this thesis, will help to make this hope a reality.